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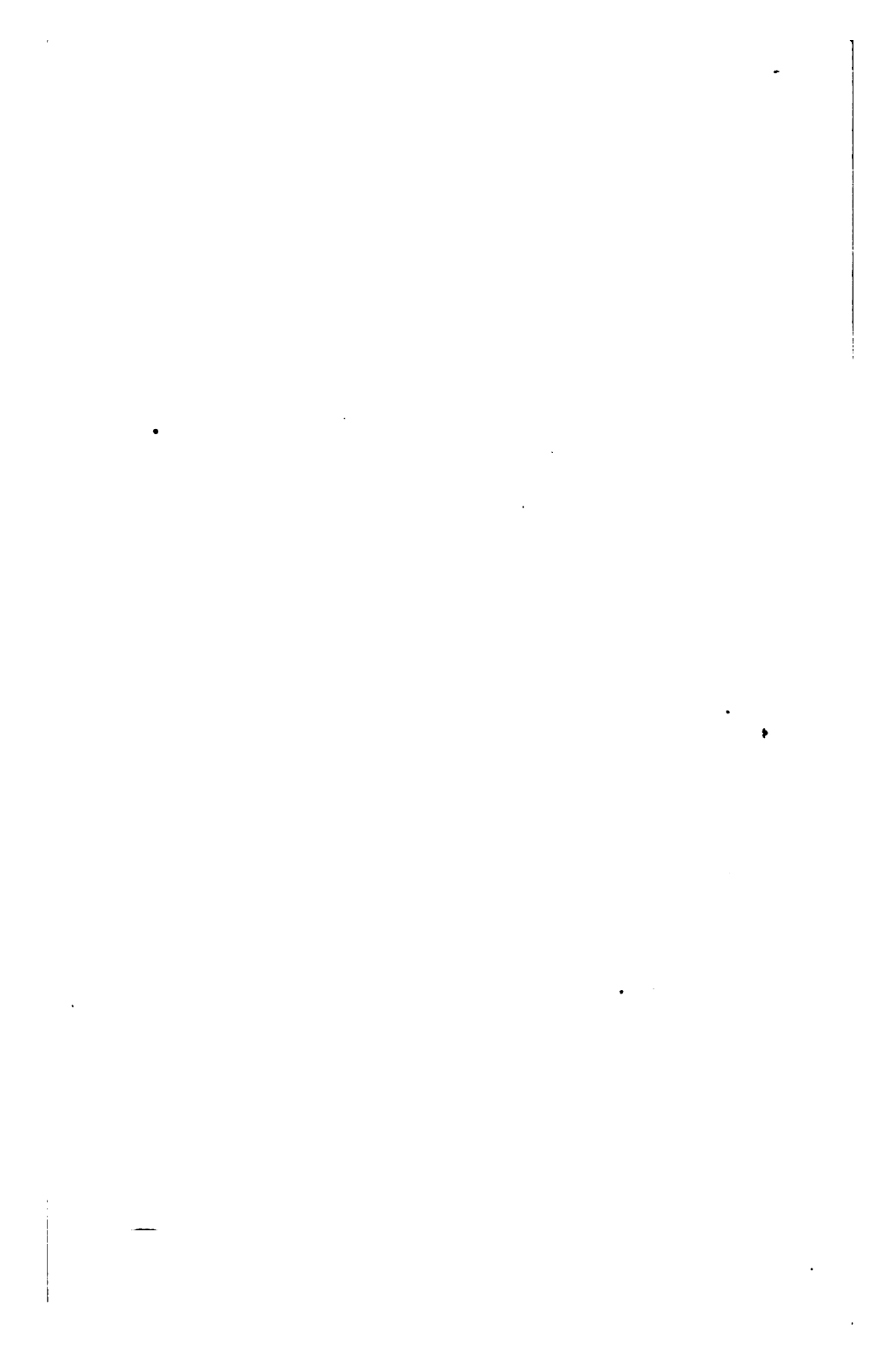
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THE

LIFE AND INDUSTRIAL LABORS

OF

WILLIAM WHEELWRIGHT

IN SOUTH AMERICA.

non autista
BY J. B. ALBERDI,

(LATE MINISTER OF THE ARGENTINE REPUBLIC TO FRANCE AND ENGLAND.)

Translated from the Spanish, with Additional Memoranda.

WITH AN

INTRODUCTION BY THE HON. CALEB CUSHING,

UNITED STATES MINISTER TO SPAIN.

BOSTON:

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INTRODUCTION.

THE present publication has been prepared as a genuine labor of love, by the surviving relatives of Mr. Wheelwright. It is for the most part a translation, made by them, from the work of Mr. J. B. Alberdi, recently published at Paris, in the Spanish language, under the title of

“LA VIDA Y LOS TRABAJOS INDUSTRIALES DE WILLIAM WHEELWRIGHT, EN LA AMERICA DEL SUD.”

Mr. Alberdi is an eminent citizen of the Argentine Confederation, distinguished in diplomacy and as a writer on questions of international jurisprudence. His memoir of Mr. Wheelwright, including an exposition of the industrial labors of the latter in the Republics of Chili, Peru, Ecuador, and La Plata, is composed with a knowledge of the facts, an amplitude of details, and a just appreciation of the subject in all its bearings, which could be acquired only by personal observation and access to local information in South America.

Of the character and public services of Mr. Wheelwright, the author speaks in the spirit and language of enthusiastic admiration, which, if highly colored, is yet natural and excusable on the part of a South American, and especially a son of the Argentine Republic.

For, while Mr. Wheelwright was justly honored in his native country for his many high personal qualities and the celebrity he had acquired by arts which promoted either directly or indirectly the welfare of all mankind, and which therefore in effect reached the United States, still the imme-

diate field of those important acts was in the countries of Spanish America.

In those vast and even yet imperfectly developed regions, Mr. Wheelwright was the pioneer of all those great works which in our day have changed the face of the world,—steam navigation, railways, gas, harbor improvements, the exploitation of coal, and other instrumentalities of material prosperity and advancement, entitling him to be ranked among the great benefactors of his race, especially in South America.

It is most fitting, therefore, that conspicuous testimony to his merits should come to us from Spanish America in the work of Mr. Alberdi.

But Mr. Wheelwright was after all a citizen of the United States, devotedly attached to his country, never forgetting it in the midst of his foreign toils and triumphs, fondly recurring in all times and places to the recollection of his native land, his birthplace, and the kinsfolk and the friends of his youth.

It is therefore fitting, also, that his surviving relatives should desire to give publicity in our own language to the full account of his industrial achievements drawn up by Mr. Alberdi.

The writer of this brief note is proud to be able hereby to contribute his humble part toward perpetuating the memory of a most esteemed compatriot, with whom he maintained constant relations of sincere friendship from the days of childhood onward to the last years of the long and honorable life of Mr. Wheelwright.

C. CUSHING.

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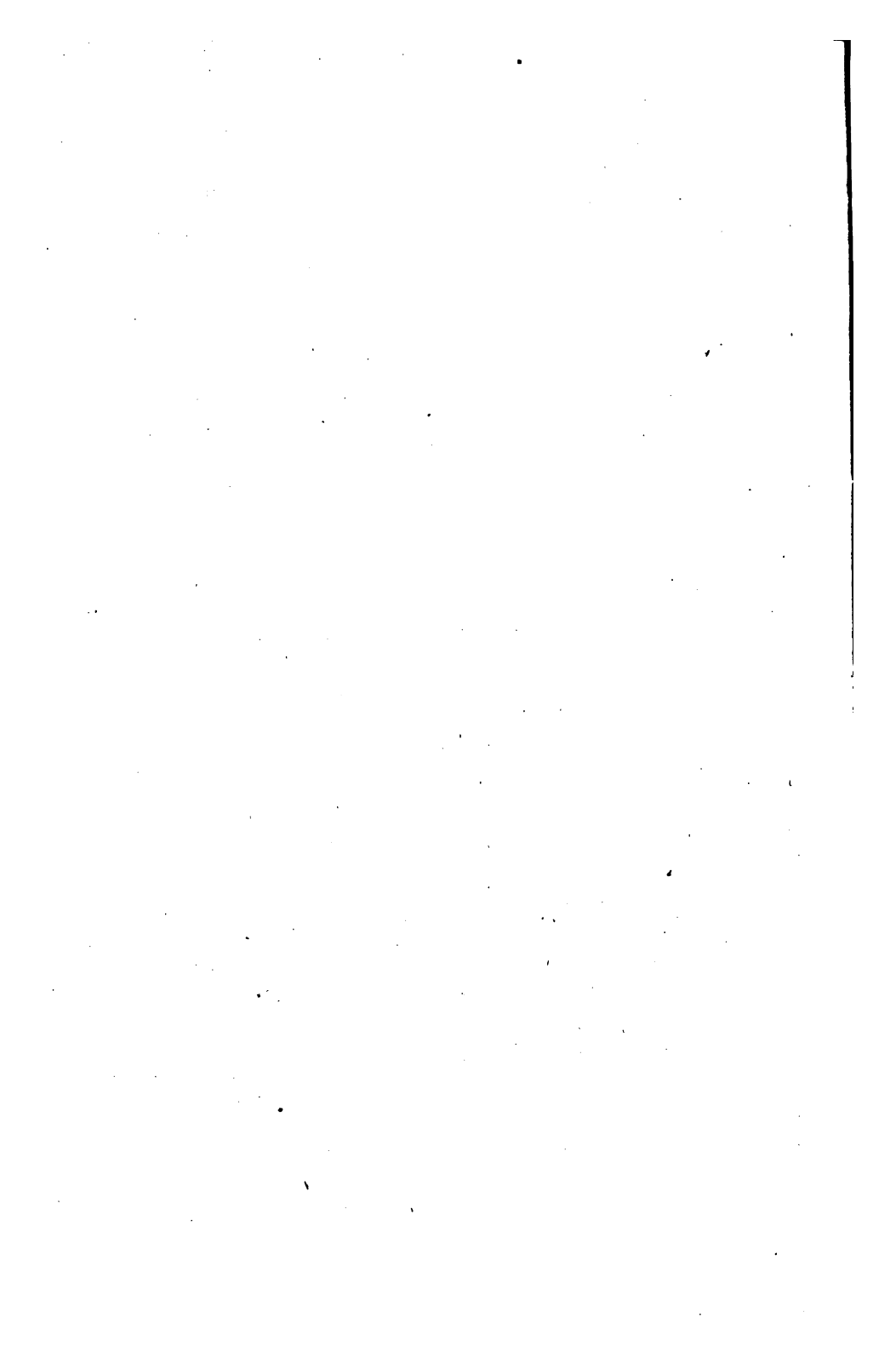
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LIFE OF WILLIAM WHEELWRIGHT.

CHAPTER I.

INTRODUCTION.

THIS is the biography of a man who, having neither fought battles, nor gained victories, nor held office in the state, nor even so much as citizenship, nevertheless rendered such and so great services to the country in which he lived that her history would be ungrateful or blind if failing to record them in her annals. The contemplation of his life suggests two prominent considerations for South America: namely, that war is not the only department of service which entitles one to a place in history; and that a foreigner, even if he is not a citizen, may do more to promote her welfare than the most distinguished patriot.

The life of Wheelwright forms a part of the history of the progress of South America during the last fifty years. The disinterested character of

his services for the public welfare reveal the compatriot of Washington and Franklin. He is the personification of his country acclimated in South America, and work like his is the best and surest method the rival republic of the North can employ to destroy the relics of a despotism which has so retarded the progress of our own States. Our rulers fear such a form of invasion more than an armed conquest. They prefer to copy the written laws of the United States, rather than to receive those laws embodied in the manners and customs of its citizens.

Notwithstanding their great magnitude, the services Wheelwright has rendered to the countries of South America have cost neither blood nor tears, nor treasure paid by the government in the form of salary or compensation. His labors, neutral in their character and broad in their range, separated him wholly from political strife and local interest. His illustrious name is not identified with any partisan warfare, and therefore his biography will not be the rallying point of a political party, as his statue will not be a monument to the greatness of a demagogue.

Is it not time that the history of South America should cease to consist only in the record of its

wars and the deeds of its warriors? Even this history of war would have its useful meaning and would be a fruitful source of instruction if it could be reduced to a general review of the country as a whole, passing over the territorial losses and changes of particular States, which were productive only of heavy public debts, and were prejudicial to the progress of the country at large. In a comprehensive review like this it would appear that the spontaneous growth of commerce was the natural remedy for the calamities springing from a state of strife and disorder. This revolution, more economic than political in its essence, has never occupied the attention of any historian.

The growth of commerce and industry, the introduction of social and material improvements, are of more vital interest to South America than its wars, which have produced scarcely anything beyond written proclamations of liberty and foolish boastings of progress.

History is beginning to be regarded in a new light in this century, for it has everywhere been sullied by the same exaggerated ideas, the pernicious effects of which have been felt in retarding social improvement. "If we call to mind," says Herbert Spencer, "that history is full of the deeds

and exploits of kings, insomuch that the phenomena of industrial organization, visible as they are, have but recently attracted any attention, and if we remember how all eyes are fixed upon those who govern, so that no one until these latter times has had a thought for the vital phenomena of spontaneous co-operation, to which nations owe their life, their growth, and progress, we cannot fail to see how radical have been the mistakes in the conclusions which have been formed by writers on social questions." These questions are beyond all doubt those which most affect the future destiny of South America, because they are no other than those of its settlement and exploration, the cultivation and exploitation of its rich and virgin soil. The much-discussed subjects of immigration and colonization, of commerce and education, of roads and harbors, — what are they but questions of social life or death for South America?

It is generally admitted that modern civilization is represented by the development of material interests, that is, commerce and industry, production and wealth, modes of communication and transportation. In what sense is this true? In the sense that material improvement is the elevation of the moral and intellectual level of a country. But

whenever one proposes to write the history of any of the countries of South America, the record of its commercial or economic development is totally ignored, in order to chronicle its political revolutions and the deeds of its heroes. The real revolution — the one most fruitful in its results and that most worthy of being chronicled on account of the instruction it affords — is not that which substituted in the place of a foreign and inefficient government another equally inefficient, although of American origin; but the change from the old system, whose policy had kept the country in a state of poverty and isolation, to a new one, whereby it was opened to the commerce of the civilized world.

"The political history of the South American republics," says the 'Times' of the 14th of October, 1874, "has been one dismal record of rebellions, revolutions, outrages on authority, and assassinations of Presidents."

It would doubtless be impossible to give a true idea of the modern life of South America, and yet ignore her wars of independence. That period has certainly a more intimate connection with her present progress than the period of her subjection to Spain. • If the colonial history of North America is the proud record of her ancient liberties and civil-

ization, that of South America is but the sad story of her degradation and obscurity. But the new system, once established, began immediately to increase population and capital, as well as to advance the interests and enlightenment of America once Spanish, but now beginning to free herself from the trammels of a policy so unwisely and persistently maintained by the mother country. Her wars and warriors, instead of producing these results, have been generally the greatest obstacles and drawbacks to her progress.

The history of the change effected in the material advancement of South America could not fail to recognize the fact that steam, as applied to locomotion by sea and land, has been the most powerful revolutionary agent of this century. In setting man free from his natural tyrants, time and space, it has made him a demi-god mightier than the fabled god of war. To conquer and annihilate those two enemies of the South American, to unite South America with herself and with Europe, to augment the unity of her separate States, was the glorious task of Wheelwright. By introducing steam into that country he has effected the most complete transformation in its national and foreign policy.

Peace has her heroes as well as war. Bolivar and

San Martin well earned their titles of "heroes of the Andes," by scaling those lofty summits with their cannon; but shall we deny the same title to Wheelwright, and Meiggs, his countryman, who have crossed them with iron locomotives? Such an exploit is almost as wonderful as that of Vasco Nuñez de Balboa, who carried over them, three centuries before, the first European vessels ever seen in the Pacific.

The descendants of a race capable of such feats can extend their glory and multiply their heroes, if the country shows itself grateful for the cost of her civilization.

We have previously intimated that the part of the foreigner is an all-important one in the progress and improvement of South America. Although the constitution denies him the privilege of office, it grants him equal social rights with the native citizen. Hence the foreigner can become contractor or banker, merchant or agriculturist; and in the ordinary course of industrial pursuits may render service to the country of which the patriot, as such, is not capable. The latter, although he has the monopoly of government patronage, is obliged to yield to the foreigner in other branches of labor, because of the latter's knowledge of practical affairs.

The natural result of this state of things is twofold: in the first place, civil society in countries, once colonies of Spain, is composed of better materials than political society, because the former is made up of foreigners, superior to the natives, at least as regards their habits of industry; secondly, the progress of the country is less indebted to its native patriots than to its foreign residents, notwithstanding the exclusion of the latter from political rights.

For the explanation of these facts we must look to the historic and colonial precedents of the South American people. Deprived from their very origin of the liberty of entering into commerce, manufacture, agriculture, the arts or liberal sciences, or of gaining their livelihood thereby (the mother country having reserved the monopoly of this privilege for herself), it happened that the natives of South America, at the time of their emancipation from the yoke of Spain, found themselves confronted by masses of foreign immigrants educated in the skilled labor of which they were totally ignorant, and in which they were therefore unable to maintain any successful competition; consequently the only sphere open to them was the political, and this explains the rapacious zeal with which government offices are

sought, with the pretence of patriotic motive perhaps, but in reality because they are the sole means of gaining livelihood and fortune. Not only is this service paid at a rate far beyond its value, but the office-holders themselves are considered as entitled to public honor.

Wheelwright represents that distinguished portion of South American society denominated the *foreign element*, and his labors are the best illustration of what intelligent immigration can do in promoting the civilization of the country. The fundamental laws have not failed to recognize this important element of prosperity, to wit, "That immigration shall be promoted and cherished, from considerations of sound policy, as being the best means of education and of progress for the new States of South America."

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It is thus distinctly admitted by their own laws that the country may be more indebted to the services of foreigners for her prosperity than to those of her own sons, and the example of Wheelwright is a triumphant attestation to that truth.

CHAPTER II.

ANCESTRY AND BIRTH OF WILLIAM WHEELWRIGHT. — HIS FAMILY AND EDUCATION. — BECOMES CAPTAIN OF A VESSEL. — VOYAGE TO SOUTH AMERICA. — HE IS SHIPWRECKED, AND THUS COMMENCES HIS LIFE IN THAT COUNTRY.

“L’homme est pour ainsi dire tout entier dans les langes de son berceau.”

— A. DE TOCQUEVILLE.

WILLIAM WHEELWRIGHT was born in Newburyport, a small maritime town of Massachusetts, United States of America, in the year 1798. His parents were Ebenezer and Anna Wheelwright. His father was descended from an ancient Puritan family, of Lincolnshire, England, one of whose members was the classmate and intimate friend of Oliver Cromwell.

Young Wheelwright was educated at Andover Academy, one of the most celebrated schools of the American Union at that time.

The greatest difficulty which presents itself in writing the early part of his life, which was spent in his native country until he had arrived at the age

of twenty-three, proceeds from his modesty, since he never occupied himself with any details of his personal experience. This is commonly the case with men who have distinguished themselves in industrial pursuits. Franklin left in writing all that is known of him personally, for he was not only a man of science, but engaged in political life. Wheelwright, on the contrary, had no public life in the ordinary sense of the term. We are accustomed to regard only those as public men who are identified with the politics of a country, or, more properly speaking, with the administration of its government. But should we not concede a public career and a place in history to a man who, by his numerous and valuable enterprises, contributed more than governments to unite America with herself as well as with Europe, and to consolidate, so to speak, political and social order in more than one of its States?

It is easily understood how the history of a government under a dictator like Cæsar should pass for the history of a country; but that the history of a people should overlook the circumstances which have advanced its social progress and material improvement is quite inconsistent with democratic ideas. When American history shall chronicle whatever interests society at large, war and warriors, politics

and politicians, will share the posts of honor, which they now monopolize, with industry and artisans, with commerce and merchants, who are the truest representatives of modern society.

Wheelwright did not invent the lightning-rod, like Franklin, but he introduced into South America the inventions of his compatriots Fulton and Morse. He did not make international treaties, like Franklin, but he established lines of steamers and constructed railroads and telegraphs, which bind nations together more firmly than diplomacy.

Men are the product of the society in which they are born and trained, as well as of the family and the school. We have remarked that Wheelwright was a native of New England. The society of New England is exceptional to that of the United States in general. The six States of which that section is composed formed, from their origin, a world by itself within the territory of that great country.

"The foundation of New England," says De Tocqueville, "was a novel spectacle, and all the circumstances attending it were singular and original. The settlers who established themselves on her shores all belonged to the more independent classes of their native country. . . . The other colonies

had been founded by adventurers without families: the immigrants of New England brought with them the best elements of order and morality. . . . But what especially distinguished them above the others was the aim of their undertaking. They had not been obliged by necessity to leave their country; the social position they abandoned was one to be regretted, and their means of subsistence were certain. . . . Their object was the triumph of an idea."

That was the twofold idea of political and religious liberty. In this view the settlers of Massachusetts were not mere immigrants, but pilgrims. They did not emigrate for the sake of gold or subsistence, but they were impelled by an exalted purpose, — that of escaping all oppression, whether civil or religious. Two centuries later, De Tocqueville found that original peculiarity of the Americans of New England intact and vigorous.

To such a society Wheelwright owed his birth, his early education, his upright character, and his superior capability for great enterprises. This society, whose sound and robust character takes the place of noble family and classic education, gave a double diploma to him whose fortune it was to have been nurtured therein. The fact of coming into existence under such conditions is equivalent

to being born of a race wholly distinct, if, as Franklin says, "Nobility consists in virtue."

New England was the cradle of the United States, both as regards the fundamental ideas of its social order and the multitude of great men whom Wheelwright numbered among his compatriots. Such were the philosopher Franklin, the statesman Webster, the abolitionist Sumner, the philanthropist Peabody, the poet Longfellow,—all of them of Massachusetts, whose capital, Boston, called "the modern Athens," has eclipsed the ancient city in its love of liberty.

If Wheelwright owed to such an origin the elements of his superior mind and character, the circumstance of having been born in a sea-port decided his calling and the destiny of his life. His birth by the seaside made him a mariner by profession, as would have been the case with Franklin, if his father had not apprenticed him to a printer in the hope of diverting him from the life of a sailor. What Franklin's father feared in respect to his son was realized in Wheelwright's case. Devoted to the sea from his boyhood, and promoted to the command of a merchant-ship at the early age of nineteen, his profession as a seaman made him acquainted with South America. There he was

destined to be shipwrecked, for want of a harbor at a point which, but for this defect, presented the greatest facilities for trade.

This circumstance suggested his future career. Henceforward his life was to be devoted to the improvement of that country, and especially its coasts, by the supplying of harbor-works, light-houses, dikes, moles, and warehouses, in order to link together two things, viz. internal railways and international steamship lines. These led on naturally to his subsequent labors, — the prospecting and opening of the soil which was to yield coal for the steam, and saltpetre for the manufacture of powder, by means of which the mines of coal and of precious metals were to be developed.

If we consult Wakefield, Merivale, Roscher, Jules Duval, Paul Leroy-Beaulieu, or any other writers on political economy, who have studied the best means of settling a new and uninhabited country by foreign immigration, we shall see that they all agree upon this point, namely, that the enlargement and improvement of its harbors are indispensable requisites to that end. Bearing in mind the fact that the pre-eminent need of this country was to be thus peopled from Europe, we can well understand that the advent of Wheelwright in South

America seemed a boon from heaven, granted to aid its civilization. He was the man she needed, and he came at the very time of her necessity.

There would really seem to be something providential in the destiny of Wheelwright, especially when we consider other singular circumstances in addition to those already indicated.

He arrived in Buenos Ayres during the presidency of Rivadavia, a man of enlightened ideas, and who was anxious for the progress and elevation of his country. At the time of which we are speaking, he was endeavoring to open the port of Ensenada, hoping thereby to encourage immigration, with a view to peopling the vast and fertile region lying between the sea-coast and the Andes. Wheelwright was the man who was one day to carry out those projects, although in a manner and to an extent of which Rivadavia could then have had no conception. That day, however, was many years distant. At the time of which we are speaking Wheelwright did not remain at the River Plate, and shortly after his departure for the Pacific coast, the government of Buenos Ayres passed into the hands of Rosas, a man in all respects the opposite of his predecessor, and who for thirty years, by his retrograde policy, rendered the fulfilment of such plans impracticable.

Wheelwright's arrival on the Pacific occurred at the time when Bolivar had just destroyed at Ayacucho the tyranny which for centuries had held these countries in an isolated condition. Without intercommunication, without roads, trade, or industry, they were poor, obscure, and cut off from all direct intercourse with the civilized world. This state of things found in Wheelwright the man whom victorious liberty needed to initiate a work of progress in the peaceful arts. To this work he devoted himself successfully for a period of years. He then returned to the River Plate, where Urquiza, the conqueror of Rosas, had just broken the power of those colonial laws which had closed for years the Argentine river-ports to the commerce of the world. In accordance with the new situation, he had inaugurated the programme of Rivadavia, and in its realization he found an able co-operator in Wheelwright. Twenty years later, or fifty years from the date of his arrival in that country, the existence of thirty flourishing colonies, a large and increasing system of rail communication, and the utilization for purposes of commerce of one of the finest natural harbors in the world, all bear witness to the far-sightedness and energy of the shipwrecked sailor.

CHAPTER III.

WHEELWRIGHT'S SHIPWRECK AT BUENOS AYRES.—NEW DIRECTION WHICH THIS INAUSPICIOUS EVENT GAVE TO HIS LIFE.—WHEELWRIGHT DECIDES TO LEAVE FOR THE PACIFIC COAST.

It may be said that Wheelwright had two births, two lives, two countries; at least, his life may be divided into two parts, which form, as it were, two separate existences. The first of these begins with his birth in 1798, and closes at the age of twenty-five; the other, with his escape from shipwreck in 1823, when he nearly lost his life in Buenos Ayres, until his death in London fifty years afterwards. Forty years of his life were spent on the Pacific coast, and twelve at the River Plate. It was a singular but very natural circumstance that this man of the two Americas should have directed his operations from London: for that city is the organic centre of universal progress; it is the great mine of capital, of freedom, and of intelligence for all nations.

Thus Wheelwright was a gift which the waves of the Rio de la Plata brought to South America, his vessel having gone to pieces on the bank of Ortiz. A new Hernando de Cortes, he remained in the land of his shipwreck, in order to conquer its soil, not by arms, but by steam; not for Spain, but for civilization; not for the all-absorbing North America, but to assure South America in the possession of herself.

In both his lives he was of seaside origin. Born in North America, at Newburyport, and in South America, at the port of Buenos Ayres, he stepped upon her shores in utter destitution, as did his Puritan ancestors when they disembarked on the coast of Massachusetts, two centuries earlier, with no other tools and equipments than their genius and their zeal. He had no need of more to gain wealth and fame; and the inauguration of a railway at Quilmes, which binds that village to its capital, was a generous recompense for the hospitality received from its inhabitants fifty years before.

As the climax of these romantic circumstances, after his death in London, his lifeless body was carried to Newburyport, where it rests to-day near the home of his childhood. It was a singular coincidence that everywhere his destiny should have

been associated with ports. He made the port of Taboga, in the Bay of Panama, the harbor it now is; he created that of Caldera, in Chile; he gave to many ports of the Pacific light-houses, buoys, gas and water works, telegraphs and railways. What naturally most riveted his attention and engaged the activity of his later years was the port which Buenos Ayres needed to justify its celebrity, and the want of which had nearly cost him his life. His last public work was to connect Buenos Ayres with her natural sea-port of Ensenada.

South America exhibited, involuntarily perhaps, a singular hospitality towards this beneficent man. In all the countries where he scattered benefits, as he went he was the victim of some misfortune, more or less serious, which endangered his life, but happily without shortening it. On the shores of the Argentine territory he escaped being drowned; in Chile, being assassinated by a maniac, who struck down his companion in the street; in Peru, being killed by robbers, who stripped him and left him for dead; and in Panama he recovered from the yellow fever, to which he nearly fell a victim.

What course did Mr. Wheelwright pursue after the loss of his ship in 1823? To return to his own country was far from the intention of an ambitious

captain, who had lost his ship on her first foreign voyage. He therefore embraced the opportunity offered him of doubling Cape Horn as supercargo of an American vessel, and during this passage he was more than ever convinced of the danger of those coasts, the condition of which had never been improved since their discovery by the Spaniards three centuries before.

CHAPTER IV.

WHEELWRIGHT'S FIRST YEARS ON THE PACIFIC.—HE IS ENGAGED IN THE NAVIGATION OF ITS COASTS BETWEEN VALPARAISO AND PANAMA.—HE GAINS VALUABLE EXPERIENCE AND FORMS NEW RELATIONS, AT THE SAME TIME ESTABLISHING HIS CREDIT.—INVESTIGATES THE NECESSITIES AND RESOURCES OF THOSE COUNTRIES PRELIMINARY TO HIS FUTURE ENTERPRISES.—SETTLES IN GUAYAQUIL, AT THAT TIME THE CHIEF PORT OF COLOMBIA AND OF THE PACIFIC.—ACTS FOR SOME YEARS AS UNITED STATES CONSUL.

It has been said that Fortune often comes to the assistance of superior men. This circumstance is easily intelligible without attributing it to a supernatural cause. Superiority consists in the determined will of one who perseveres until the end is clearly seen. "Fortune is blind, but not invisible," says Lord Bacon. That of Wheelwright was to arrive on the Pacific at a time when his capacity was a necessity of the situation. Wheelwright on the Pacific was Wheelwright in his true sphere, that is to say, on the field which good fortune had assigned him as a theatre for his work of transformation and progress.

Two remarkable events occurred during the years 1824 and 1825. Bolivar had just destroyed, at Ayacucho, the Spanish colonial power. George Stephenson, in London, had invented his locomotive, and, on the 27th September, 1825, had inaugurated his little railway from Darlington to Stockton. Eleven years previous to this date Wheelwright had witnessed in his boyhood the trial trip of a steamer built by his countryman Fulton. To utilize these two inventions for the benefit of South America became the object of his life. He introduced into that country the great motive power which was destined to unite all the nations of the world. These two events signalized a new and higher destiny for this part of South America. It was a time of great expectation and hope for the future.

Commercial affairs were in an embryo condition. Everything was yet to be developed. In every branch of business there was promise of great and certain results. Those crises which are the gifts of Fortune to the spirit of enterprise have also their dark side, — the struggle to be maintained at every step with the habits of routine, the indolence and ignorance stamped upon the manners and customs of a people by institutions of secular back-

wardness. It was said in the case of Stephenson that material obstacles are not to be named in comparison with moral obstacles, and there is no material hindrance which will not find an ally in a man opposed to progress. Wheelwright was yet to learn this by experience. His life in South America was to be a campaign of incessant battles but final victories.

At every step in this biography we must recognize the fact that it is not possible truly to appreciate his life, or the value of his labors, unless we take into account the period in which he conceived and carried these works into effect. Without this method of just historical appreciation, we cannot truly estimate human greatness. Columbus himself would dwindle into a pigmy if his first voyage across the Atlantic should be judged by one which is now so easily accomplished by the ordinary navigator. There is a rule of comparison which prevents the confounding of different cases. Every great enterprise worthy of being chronicled in history has been regarded as Utopian previous to its accomplishment; every great inventor has been considered a visionary until the dawn of his success. Wheelwright's enterprises in South America formed no exception to this rule; they were all regarded as impracticable

until they became facts. Incredulity was his great enemy, not because his conceptions had not already been put in practice elsewhere, but because South American countries were not ready to receive and apply the ideas of the man who was the first to introduce them. If under the given circumstances the merit of this introduction did not equal that of the invention itself, it would not be worthy of the reward conferred upon it by legislation in all civilized countries.

Having arrived in Chile, the terminus of his voyage from Buenos Ayres, he remained there only a short time. Chile, like Buenos Ayres, possessed a liberal government under Freire and Egaña; yet foreign commerce was yet to be developed in that country. Chile was then as unable to maintain a marine as Buenos Ayres; it was even less able, because the latter united in the same city its port and capital. The custom-house of Chile, on the contrary, was established at Santiago, thirty leagues from the port of Valparaiso. The latter was then a mere landing-place, with a population of only fifteen thousand. It was still far from being the emporium of the Pacific that it afterwards became, for the simple reason that commerce was not as yet born on that soil. The business houses upon which Wheel-

wright afterwards relied for the patronage of his steamers were not even in existence.

The Spanish colonial system of commerce, it is true, had recently been abolished by the victory of Ayacucho. The south of Chile, however, was still in the power of the Royalists, and Callao in that of the Spaniards even after that battle. But the initiative of a change was no longer in the hands of Chile, who had lost her opportunity after the retreat of San Martin from Peru. All this great reform proceeded from Colombia, where the victorious sword of Bolivar had opened the Pacific to the free access of the commercial world. The sea-port of Colombia, in the southern waters, was Guayaquil, a city at that time of more importance than Valparaiso, for the reason above mentioned, and also because it was more populous.

His vocation as a sailor, which brought Wheelwright from Massachusetts to Buenos Ayres, and from that country to Chile, induced him subsequently to navigate the coasts of the Pacific, from one to another of the newly-formed States. It was the best preparatory school for the future international labors which were to occupy his enterprising life.

For several years he busied himself in cruising

along the coast between Valparaiso and Panama. The sea at that time was a place of more security to the foreigner than the continent, agitated by civil war. The shores of the Pacific were then the theatre of the grandest events of its history. The ruins of the Spanish colonial edifice and the American materials of a new structure confronted each other. This life was for Wheelwright a course of study in the political economy of that country, its wants, its resources, the manners, customs, and adaptability of its inhabitants to industrial and commercial pursuits. Thus he laid the foundation of his capital of experience and credit, of which he accumulated a vast stock in a few years, and was prepared to enter upon the great career of enterprise which has given him historical renown.

Maritime commerce cannot exist without internal trade, which must be fostered by production, capital, labor, and security of communication. It was the duty and for the interest of the foreign commercial world to put its shoulder to the work of creating and sustaining all this for mutual advantage. The independence of the republics of Colombia, Chile, and Peru signified the abolition of the system which had kept those markets closed to all commerce excepting that of the mother country. Its first effect

was to be the creation and formation of as many other markets, which would be open to unrestricted traffic with all the nations of the world. In order to realize his plans in this regard, it was indispensable for Wheelwright to fix his residence at some important point on the coast. None was so available as Guayaquil, the principal harbor of the Republic of Colombia, so influential at that period. It was without doubt the principal port of the Pacific as well, so long as the Spaniards held military occupation of Callao.

The esteem and respect which Wheelwright had already secured during the few years of his residence on the Pacific could not fail to be appreciated by his own countrymen, as well as by the people among whom he had made his new home, and it was not long before he was appointed United States consul at Guayaquil. This position was one of immense importance for the future development of his industrial career.

A consul in those days possessed the importance of an ambassador. Diplomacy had no object and no existence in countries recently born into political life, and whose *de facto* governments were not recognized by the old nations. Commerce, the great interest in which their new existence was concen-

trated, was sufficiently guarded by its natural agents, the consuls. The latter availed themselves, in the mean time, with the consent of the countries where they resided, of all the immunities and privileges of diplomatic envoys. The consulate of the great republic of the United States took the lead of all the rest, having been the first established, and it thus became an asylum for all who were persecuted from political motives.

Soon after Wheelwright was installed as United States consul, Colombia entered upon the period of her dismemberment and dissolution. This situation of affairs brought him into intimate and constant relations with the Colombian political chiefs. He treated all of them with equal consideration, and thus converted them into his devoted friends. His position, moreover, afforded him frequent opportunities of rendering signal services to a multitude of generals and party leaders, who, in the vicissitudes of civil war, sought an asylum under the American flag. His neutral and hospitable house served as a refuge for the chiefs of all parties, who, in later and more settled times, came to occupy the highest and most influential positions in the government. These relations became invaluable when the time arrived for the establishment of steam-navigation. It must

not be forgotten that Guayaquil was the principal port of Colombia, to which republic then belonged the Isthmus of Panama, as being part of New Grenada, the nearest point, geographically speaking, of South America to the United States of America of the North, and the natural one of contact between the Pacific and Atlantic Oceans.

I refer to these facts in the life of Wheelwright because the career of a man can best be estimated by studying the circumstances by which it has been influenced.

The dismemberment of the republic of Colombia produced a fundamental change in the commercial condition of that part of the country. This resulted in the gradual decline of Guayaquil, and in the same proportion Valparaiso began to increase in importance, chiefly for this reason, — that in Colombia the ruling administration disappeared in the midst of civil dissensions, while in Chile it was established and strengthened, with an energy which has not ceased to be felt at the present day. Consequently Guayaquil ceased to be the port of the principal republic of South America of that day, and became the mere port of the little State of Ecuador. Its advantages, therefore, could no more be compared with those of Valparaiso than the commercial im-

portance of Ecuador could be contrasted with that of Chile. Valparaiso, as the port of the Pacific nearest to the Atlantic by way of Cape Horn, thus became the commercial metropolis of the west coast. It possessed geographical and other advantages of which even California cannot deprive it. It assumed that importance, not only as the nearest port to Europe, but also on account of the enlightened and progressive policy of the Chilean rulers. Where there is no settled government, there is no security, no peace, no commerce, and consequently there can be no undertakings for the promotion of general progress.

Circumstances like these are sufficient to explain the removal of Wheelwright, with his spirit of enterprise, from Guayaquil to Valparaiso.

CHAPTER V.

WHEELWRIGHT LEAVES ECUADOR AND TAKES UP HIS RESIDENCE IN CHILE.

IN 1829 there arrived in Chile two men who subsequently exerted a great influence on the destiny of that country, — Don Andres Bello and Mr. Wm. Wheelwright. The former became famous as a journalist and professor of international law in the university, while the latter on his part put into practice the works of public benefit which he (Bello) advocated.

The initiative of the commercial revolution on this coast was now within the grasp of Chile, or rather of its great emporium, Valparaiso. Having settled there, Wheelwright remained for many years in that city, which was the theatre of his first enterprises. There he continued studying the necessities of these countries with relation to commerce. This investigation resulted in a knowledge and experience of men and things which were ultimately of inestimable value to South America as well as of personal benefit to himself. He could not have

selected a better location as a starting-point for his great career. If the material progress of Chile in after times owes its inception to him, his own success was in a great measure due to her hearty co-operation.

Soon after his arrival in Chile in 1829, Wheelwright established a line of packets between Valparaiso and Cobija, the principal port of Bolivia, and took command in person of an American schooner, "La Veloz Manuela," which had a high reputation for its fast sailing, and for the care and good treatment which the passengers received from the most popular captain who had ever navigated those waters.

The condition in which Wheelwright found the cities of the Pacific, resulting from the colonial system of Spain, was directly opposed to the part they were destined to play in the commercial world. They were uncleanly, unhealthy, badly paved, destitute of water, destitute of everything, in fact, which a city requires in order to become rapidly peopled by emigrants from civilized countries. In view of these necessities, Wheelwright entered upon various schemes which were as useful as they were brilliant. The first of these was to provide Valparaiso with water-works. These were followed by gas-works.

But his views of improvement were not limited to the favorite city of his residence: they comprehended the entire coast. At Copiapo he introduced gas, and at Callao, in Peru, the same system of water-works which he had given to Valparaiso. We cannot realize the peculiar benefit of this introduction of water, unless we take into consideration the great danger of conflagration to which these cities are exposed. Only the lightest materials are used in the construction of buildings, on account of the earthquakes so frequent on this slope of the Andes. There were, besides, some desert places where life was rendered almost insupportable from the absence of the element so necessary to existence, and at these points this indefatigable man erected machines for the distillation of pure water. At other places he gave a permanent industry to the inhabitants by establishing the manufacture of bricks by machinery. While all these works were in progress he made numerous exploring expeditions into the mountains to ascertain their mineral resources. These were rewarded by the discovery of coal, saltpetre, borax, and lime, all of which have now become staple articles of commerce.

Meanwhile he had on hand many enterprises of secondary importance in Valparaiso, which from

their great utility have largely contributed to the prosperity of Chile, and are to-day productive of the most satisfactory results. He suggested what others carried out, and he himself accomplished what others suggested, thus completely identifying himself with the progress of that country. It is enough to say that for many years there was no work of material improvement on that coast with which the name of Wheelwright was not in some manner associated. There can be no better testimony to the enduring value of his labors than the love and veneration in which he is still held throughout the Republic of Chile.

CHAPTER VI.

THE ORIGIN OF THE PACIFIC LINE OF STEAMERS.

NOTWITHSTANDING the prosperity of Chile, its distance from Europe was a great obstacle to its progress. During his passage around Cape Horn, already noted, Wheelwright became convinced that the chief misfortune of that country consisted in its remoteness from Europe and civilized America. Emancipated as these republics were from the dominion of Spain, they still remained under the yoke of tyrants not less despotic; we mean the time and the vast space which held them, to a certain degree, in their former isolation with regard to the more advanced nations of the world.

The first result of their independence, which was the opening of their ports to foreign commerce, was somewhat neutralized by the fact of their antipodal situation and the entire absence of systematic communication. How to overcome the latter difficulty, which was more formidable than that of the tyranny of Spain, was the question of life or

death for that country, after that of their political independence had been settled. But this problem had been partially solved by the invention of Fulton; and his countryman, who had watched with such intense interest the trial of his steamer, was destined to introduce it into South America, and thus to bring the freed States into connection with Europe and his native land. The genius which inspired in one American the invention of steam navigation, dictated to the other the idea of its introduction and application in a manner almost as novel and daring as was its first conception. The mere mention of such a project was at that time considered evidence of the self-delusion of its originator.

We have already said that, in order justly to appreciate the genius of Wheelwright, we must contrast it with the time when he lived and more especially with the country where he labored. The events we are now recording took place thirty-five years ago. The lighting of cities with gas, the establishment of lines of steamers, railways, and telegraphs, although honorable to any one who undertakes such enterprises of public convenience, are not at the present time attended with the difficulties that assailed them at first. He is deserving of glory who transforms Utopia into reality, who

has been accounted mad because he possessed ideas above the comprehension of his fellows.

Let us see how Wheelwright arrived at the conception and execution of his greatest undertaking, — which was the organization and establishment of a line of steamers between Valparaiso and Panama, the same line that now extends to Europe by the Straits of Magellan.

It was not enough to conceive the idea. It was necessary to win for it public favor. The first step was to convince governments and capitalists, not so much of its advantages, which all understood, but of its practicability, which no one believed. Wheelwright's real originality consisted in his being the first to see the feasibility of such a work as this. Steam navigation at this time was making rapid progress in other parts of the world, and there was, therefore, nothing chimerical in the idea of its application to the great Pacific Ocean. That fact, however, did not prevent Wheelwright from being regarded as visionary, not only among the masses in South America, but even by some Englishmen. A British minister, resident in Peru at that time, went so far as to order his servant to deny him to "*that insane Wheelwright*" whenever he came to inquire for him. The boys in the streets of Lima more than

once insulted him as the maniac who was dreaming of bringing the coast of their country near to Europe by way of Panama.

And in truth the question was not merely that of introducing a new motive power into the navigation of the Pacific, but rather of working an entire transformation in the political and social condition of the country.

We must not proceed further in estimating the value of the man whose biography we are writing, without having it well understood that Wheelwright is not the mere representative of an enterprise more or less considerable in the western portion of South America. He represents, in reality, an entire revolution in the system of trade and of international and domestic communication. To this change we give the precise name of revolution, because it was the most sound and beneficial part of the protest which these countries made against the Spanish colonial system. In this sense our subject is the worthy successor of Bolivar, the Cochrane of the peace of the free seas of the Pacific.

The old system was of a twofold character. It consisted, first, in the dependence of the colonies on the mother country, and, second, in the form of government Spain had imposed upon them in order

to perpetuate her sovereignty. The latter was the worst feature of their system. A colony may be civilized, prosperous, and free under a government like that to which Canada and Australia owe their allegiance. On the other hand, however complete may be the independence of a form of government, it cannot alter the actual subjection of a country whose internal organization is like that of the ex-colonies of Spain. Its revolution, therefore, like its despotism, was necessarily two-fold, and consisted not only in breaking the Spanish yoke, but in freeing itself from the chains of the colonial system.

We shall see that the progress which Wheelwright represented by his complex work formed a part of this internal revolution. While the republics of the Pacific formerly occupied a remote extremity of the world, they are now placed in the very centre of the great commercial route between Europe and Asia, by the opening of the passage sought for by Christopher Columbus when he discovered the West Indies.

A countryman of Prescott, Irving, and Motley, Wheelwright was careful not to imitate the South Americans in their contempt for every Spanish source of information, simply because it was Span-

ish. On the contrary, he searched the annals of America, where he found sketched the grand idea of linking Europe with the Pacific and Australia by way of Central America. This route was the very same adopted by Spain, many years previous, in going from Cadiz to Vera Cruz, thence to Acapulco, on the Pacific, and thence to their Philippine Islands, in Southern Asia.

The experience acquired by sailing for several years on the Pacific naturally led Wheelwright to his idea of the introduction of steam. Struggling with the prolonged calms of that ocean and its frequently opposing currents, he learned to his cost the loss of time and money occasioned by such formidable hindrances. Faithful to the example of his ancestors, the Puritans, who made a resource of every obstacle, he reflected that if calms were prejudicial to sailing vessels they would be an immense advantage to steamers.

CHAPTER VII.

THE CONFLICT WAGED BY WHEELWRIGHT WITH THE REMAINS OF THE COLONIAL SYSTEM OF TRADE.

THE evils of the colonial system to which we have referred may be summed up in the following manner: —

The isolation of the towns with regard to each other on account of the want of roads and bridges; the isolation of the country at large from all the nations of the world; the dearth of all trade or industry; the prohibition of foreign immigration, and the consequent absence of all productive labor and foreign capital; the selection of dangerous ports, systematically kept in bad condition, as if to increase the already existing obstacles to commerce; the custom-house regulations, entirely hostile to anything like free trade; and lastly, the insecurity, tardiness, and inadequacy of the postal system.

This state of affairs, first brought about by the policy of Spain, was sustained by the habits which the native population had acquired under that pernicious system.

The military victory of Bolivar at Ayacucho, although it overturned the Spanish supremacy in South America, left untouched the domestic tyranny coexisting with nominal independence. The new administration still continued to produce the same injurious effects as the old, not, it is true, in the interest of Spain, but in the imperfectly understood interest of the new governments established in the name of American liberty.

There is no better evidence of this than the official impediments Wheelwright encountered in the introduction and organization of his steam-navigation; and yet no one was to reap from it greater advantages than the governments themselves, as was afterwards demonstrated by experience.

Hence it was that in seeking aid for his enterprises Wheelwright was obliged to resort to his personal friends among the foreign merchants with whom he had had relations in Chile, Peru, and Ecuador. Here he found a ready reception of his scheme, for they were not slow to see that it was indissolubly allied to their own interests. They therefore gave it their hearty co-operation, and the result proved the wisdom of their action. In the benefits that European immigration has conferred upon these countries we find the evidence of this

foresight, the first and greatest consequence of which was the introduction of capital, with all the elements of European progress. It has been justly remarked that the best emigration agent is the colonist himself, who invites and attracts his own countrymen more effectually than the most successful agency in a foreign country. In this view, Europe in America attracts Europe far better than America herself, and just so far as it is Europe that invites, so it is Europe that accepts the invitation. From this circumstance South America can learn a useful lesson, namely, that immigration having first been gained by artificial means, only the best colonists should be encouraged to emigrate.

It was, then, in commercial circles that Wheelwright began to influence public opinion in favor of his great project. This resulted in his obtaining his pecuniary resources in England, where the South American countries found theirs also in fighting their battles of independence. The two enterprises were one and the same, economically speaking.

We must bear in mind that the introduction of a novelty like a steamship into waters where it was unknown on account of their remote situation was of itself a bold venture; but to establish a line of steamships was more than bold, it was a species of

insanity, as in fact it was styled by many. It was an arduous undertaking at any time, even for one having at his command the largest resources of prestige and capital.

Who was Wheelwright, and what had he when he undertook this great work? Was he a rich merchant, a millionaire, a man of powerful influence? By no means. He was a stranger in those countries, and his whole capital consisted in that which Columbus possessed when he conceived the idea of crossing the Atlantic; his sole possession was his idea, — a great idea, which derived its power from its intrinsic importance.

Wheelwright was the moving spring as well as the instrument of that giant, public opinion, whose power nothing resists from the moment that an important design secures its sanction. To gain its approval was the whole difficulty, and the ability to surmount it proved his exceptional capacity as a projector, to whom two things are necessary, — great conceptions and the power to carry them out.

CHAPTER VIII.

WHEELWRIGHT REQUESTS FOR HIS ENTERPRISE THE CO-OPERATION OF THE GOVERNMENTS OF THE PACIFIC.

THE elements of Wheelwright's plan having been discussed in public meetings held by the commercial circles of Valparaiso and Lima, they successively received the approval of committees who were competent to investigate the practicability of the scheme. All the foreign merchants therefore (and they actually represented the commerce of those countries) gave it their unanimous and cordial support.

Sustained by this intelligent opinion, Wheelwright sought from the governments of the Pacific States their co-operation. This was in a certain degree necessary, not only, because official action is considered indispensable in those countries, but on account of the public nature of the enterprise itself. These governments, although free in name and in spirit, were composed of men trained under the colonial system already described. Liberty was in their hearts, but the old bondage was neverthe-

less perpetuated in their habits, and, moreover, they were not united among themselves with regard to their commercial policy; then, too, the governments were only just installed, and were sufficiently occupied in defending their existence, which was continually threatened by their own citizens.

The years between 1835 and 1845, during which Wheelwright conceived and executed his plan, were precisely the period most critical in the reconstruction of these republics. The first difficulty in obtaining any of the necessary privileges for his enterprise was to know of whom to ask them. The very existence of the republics at that date was problematical. No sooner had Colombia created Bolivia an independent State than she herself ceased to exist as a federal Union. Bolivia, having just entered upon her new life, was annexed to Peru. But such a confederacy was regarded by Chile as menacing her independence, and although she had only recently escaped domestic anarchy, she unsheathed her sword and dissolved the Peru-Bolivian Confederation.

All this took place when Wheelwright was busy in initiating his enterprise, which may be said to have been formed in unison with those States, and was perhaps not the least essential part

of their organization. This situation of affairs was most embarrassing to the prosecution of his plans; for the instability of the new governments presented an almost insuperable obstacle to the formation of a company depending for its capital on Europe.

The government of Chile, being more firmly established than the others, took the lead in giving support to the new undertaking, which was in turn to confer greater advantages on her than on the other States, both on account of her geographical position and the nature of her products. By a law enacted Aug. 25, 1835, Chile conceded to Wheelwright all the privileges and immunities he had solicited for his exceptional enterprise.

In order to secure similar concessions from the government of Bolivia, Wheelwright was compelled to cross the Andes to Potosi, where Congress was assembled at that time. He thus became an eye-witness of the battle of Socovaya, in which Gen. Santa Cruz took Salaverry prisoner, who knew Wheelwright personally, and confided to him on this occasion his private papers and his last words. This was one of the many instances of the respect and confidence he won from all parties, during the civil dissensions of those countries, by his loyal and constant neutrality.

In 1837 the State of Ecuador conceded to the steamers (but for four years only) the privilege of entering her ports, reserving, however, the right of coastwise traffic.

The Republic of New Granada, whose best ports, Cartagena and Santa Marta, were on the Atlantic, did not show the same readiness as her neighbors on the Pacific to favor an enterprise whose chief advantage for the latter consisted in the connection with Europe by the Isthmus of Panama. It will be remembered that Panama was the very place where had assembled the first Congress to treat of the political union of North and South America. But New Granada showed herself less interested in promoting the mercantile union of her immediate neighbors on the west coast.

The apathy of these governments was inconceivable, when we reflect that the concessions Wheelwright desired were in reality favors he requested them to confer on themselves, or rather upon the countries under their control.

Incredible as it may seem, all that he really asked was that they would permit him to introduce into a remote and solitary sea a service of public necessity and convenience. Since the time when Rome built her famous roads, it has been considered the duty

and for the interest of governments to establish ways of communication and transportation, and in modern times those of Holland, England, and the United States have maintained this policy.

It would be well to examine, one by one, the principal concessions Wheelwright solicited, in order to be convinced to our astonishment of the justice of the previous statements.

The first consisted in the exclusive right to navigate those waters in steamships for a period of ten years, and with the same advantages as those enjoyed by the national mercantile service. To have granted such a privilege to a single, isolated steamer would perhaps have implied the exclusion of any possible and useful competition; but far from asking anything prejudicial to their welfare, the inauguration of a regular steam service on a coast line of 3,000 miles in extent was the greatest boon imaginable to countries abandoned for centuries to a disgraceful isolation; moreover, the privileges demanded for it excluded no one else, for there was not even a shadow of rivalry.

The second concession consisted in the privilege the steamers were to enjoy of putting in at the different ports to land and embark passengers and merchandise, and their exemption from all har-

bor imposts, such as tonnage, anchorage, etc. This very petition itself demonstrated the continued existence in a free republic of the colonial system of trade, by which the ports were virtually sealed to general commerce. To ask of governments, established in the name of freedom, the liberty of giving them means of intercourse with the whole world, seems ironical in the extreme; for without an unrestricted commerce in the ports of the republic, the pretended abolition of the Spanish system became a mere farce. Was it not, in reality, like asking permission of a country to render it the greatest service?

The third concession consisted in the permission to establish receiving ships, for the deposit of coal without payment of custom-house duties. This privilege was so essential to the success of the new project that to refuse it would have been equivalent to refusing the liberty of steam-navigation in those waters.

The fourth concession solicited was that the government would pledge itself to the speedy despatch of the ships, and that it would suffer no hindrance to their trips, either in lading or discharging, or in entering or leaving their harbors, precision being a point of the greatest necessity. Such a petition as this, forwarded to the regular government of a country already habituated to unrestricted commerce,

would be unintelligible or would be considered a burlesque, for it was equivalent to asking the government to discharge a primary duty under the guise of a concession or favor. But Wheelwright knew by experience that such was the power of the old routine over a people who had suddenly entered upon the career of liberty that all the influence of the government was necessary in order to counteract it in the smallest degree.

CHAPTER IX.

THE RETURN WHEELWRIGHT PROPOSED TO MAKE FOR THE CONCESSIONS.

UNDER the simple garb of an industrial reform, what Wheelwright really proposed to do was to change the condition of half a continent, to substitute for that complete isolation which had been forced upon it by the most abject system which history records, a new method of commercial intercourse, promoted by means and elements the most perfect and powerful furnished by the civilization of the nineteenth century.

He did not, it is true, state his ultimate intentions in plain terms. He was too prudent and circumspect not to be aware that, in soliciting governments in affairs of such magnitude, the modesty of his proposals demonstrated his capacity of carrying them into effect. The arguments and reasons he adduced in order to enlist public support in behalf of his enterprise will be the subject of an examination we shall subsequently make, aided by quotations from the English press, the most reliable in such

affairs, and from whose principal organs Wheelwright derived the greatest encouragement.

The historic interest of his address to the South American governments justifies the literal reproduction of an extract from the original memorial. In it he called their attention "to a subject of great importance and one allied to the vital interests of the country, the navigation by steamships of the Pacific Ocean. From the experience of a long residence in these countries, I am fully convinced of the vast benefits that would result to commerce and agriculture from a regular, rapid, and safe means of communication between the neighboring States, but particularly with Europe by way of Panama. The establishment of such communication has been the object of unceasing effort, on my part, during many years.

"Maritime countries owe their rapid progress, in a great measure, to the application of steam as a motive power. There is not one of the States of Europe that has not received a new impulse from this powerful agent, and by means of it the United States have developed an immense commerce. Voyages along this coast, which at present occupy eighteen or twenty days, on account of calms and currents, could be accomplished by steam in two

days, with the additional advantages of comfort and convenience.

"The most obvious proof of the importance of steam is its general use throughout the commercial world, and if in Europe it has been applied with such success, where the facilities for communication are so inferior, how much greater benefits would it confer on these coasts, which are so destitute of those advantages.

"Among the nations most zealous for the increase of coastwise trade may be mentioned England and the United States, where steam communication has been protected to such a degree that new branches of trade and agriculture have been developed which have been productive of the most beneficial results to both those countries. It is a principle well understood that by increasing facilities of communication, the greatest advantages will be secured for all.

"In inaugurating this new service I propose to place two steamships upon a line which shall embrace all the principal points upon the coast from Valparaiso to Panama.

"In order to execute this plan it is my intention to form a company with such provisions that all who wish to take shares in it may do so, and thus all jealousies and any danger of monopoly will be avoided.

"As it is the custom of all nations to protect enterprises which are beneficial to the State as well as to the people, and particularly undertakings of this nature, as important as they are difficult of execution, on account of the great distance from the locality where the ships and their machinery must be constructed, the risk of the voyage, the liability of the machinery to get out of order, the absence of resources for making repairs, the want of coal, of skilled mechanics, etc., I ask that the following concessions may be made to me."

[Here follow the concessions already enumerated.]

In order fully to appreciate the contents of this document, we should bear in mind its date (1835) and the place from whence it was written.

The advantages which Wheelwright proposed in exchange for these concessions were obvious to the most superficial observer, but what was apparent only to the far-seeing eye of the projector himself was the grand revolution which this imperfect sketch of his enterprise scarcely suggested..

Yet this ever-present idea was, it may be said, the motive power of his steamers. The conception of a plan so vast was, in effect, what made him a great projector. To dare to attempt such an undertaking, at such a period and under such circumstances,

was the proof of his superiority ; but to have the energy and the power of will to persevere for twenty years in its heroic execution, resisted and disputed at every step, was the severest test of his capacity.

We must not omit to state here that, during the same year of 1835, Wheelwright solicited from the government of New Granada a concession which was not granted to him, although afterwards accorded to Mr. Biddle, to whom the privilege was given of building a railway across the Isthmus, for the purpose of uniting the two oceans. It is apparent that this formed a part, and was necessary to the completeness, of Wheelwright's general plan. We do not know for what reason the grant conceded to Mr. Biddle remained inoperative till 1842, but at that time the Granadian government decided that as the term of the concession of 1835 had expired, new proposals would be received. Wheelwright says in a private letter that he knew nothing of this resolution until September, 1843. But it is an undoubted fact that the idea which Aspinwall realized was a part of his grand scheme of steam communication between the Pacific and Europe. The province of Panama itself, belonging as it then did to Colombia, was familiar ground to him from the time he was United States Consul at Guayaquil.

CHAPTER X.

WHEELWRIGHT IN LONDON FOR THE PURPOSE OF FORMING THE PACIFIC STEAM NAVIGATION COMPANY. OPINIONS OF THE ENGLISH PRESS WITH REGARD TO HIS PLAN. VALUE OF MR. SCARLETT'S BOOK UPON SOUTH AMERICA.

ARMED with his official concessions, not great, but absolutely indispensable, and also with the highest personal testimonials, Wheelwright left South America for Europe. He had with him a pamphlet in which his grand idea was discussed and detailed in a very lucid manner, with numerous documents in its support, and the whole supplemented by carefully prepared maps of the Pacific coast. He arrived in London about the year 1838. He was then forty years of age, and his personal appearance was not his least recommendation. Large, well-proportioned, and sound in body, he was grave and dignified in his bearing, and at the same time most frank and courteous in his manners.

A profound economist, a consummate diplomatist, or a skilful politician could not have conceived, formulated, and executed his plan of operations with

more tact and ability than Wheelwright displayed in this mission to England, involving as it did interests of political economy, commerce, and social order.

He had the good fortune to commence his campaign under the auspices of a scientific work then only recently published, entitled *South America and the Pacific*, by the Honorable P. C. Scarlett. In this book the author suggested the possibility of connecting the two oceans by way of Central America, practicable either by canal or railway. The commercial advantages resulting from such communication between Europe and the ports of the Pacific were stated in a *Memorandum* appended to his work by Mr Scarlett, who forwarded the same to the Foreign Office. The ideas of this gentleman coincided so nearly with those of Wheelwright with regard to this scheme that he found no better means of making his *Memorandum* complete than by annexing to it, as sustaining and confirming his views, the pamphlet entitled *Statements and Plans* of Wheelwright.

Whether to him or to Mr. Scarlett belongs the priority of the suggestion is a question of secondary importance. The fact that Wheelwright's plan was appended to Mr. Scarlett's work proves at least, that it was not copied from it. It is certain that that

work afforded him a most opportune and favorable introduction to the English public, as well as to its government, and Wheelwright on his part knew how to avail himself of the co-operation of the distinguished author, and thus secure for his enterprise the sanction of the scientific world.

The London press soon began to discuss the great question of communication with the Pacific by the Isthmus of Panama, and the consequent shortening of the route to China. The reproduction of Wheelwright's own words will be the best means of becoming acquainted with his plans, and some extracts from the journals of that day will give the opinion of the leading organs of the British press on the subject.

The following details of Mr. Scarlett's *Memorandum* in the *Times* of Feb. 6, 1838, show at a glance the time required for a voyage from England to the ports of the Pacific by the fastest sailing vessels *via* Cape Horn : —

To Valparaiso	100 days.
To Lima	110 days.
To Guayaquil	120 days.

The passage by way of Panama could be accomplished by steamships in the following time : —

To Valparaiso	62 days.
To Lima	51 days.
To Guayaquil	46 days.

The difference in favor of the latter route from England to Lima would be 59 days.

According to the *Plan* of Wheelwright (approved by the same article in the *Times*, and from which we extract the following particulars), the proposed change had all the importance which he claimed for it.

"The British trade on these coasts," said Wheelwright in his *Plan* annexed by Mr. Scarlett to his *Memorandum* presented at the Foreign Office, "assumes already a character and an importance which henceforward justify and demand the care and protection of Her Majesty's government. The proposed communication cannot fail to augment its facilities and promote its security to an extent unparalleled in the annals of commerce. The shortening of the time required for communicating between Great Britain and the Pacific Coast from nearly four months to forty days will afford to the merchant and manufacturer the incalculable advantage of having constant and frequent advices, which will enable them to assort their cargoes in conformity

with the demand of the foreign markets. They will also come into possession of the avails of their merchandise three or four months earlier than they are now able to obtain them. Their agents will have the advantage of receiving prices current in markets which embrace a coast-line of 3,000 miles in extent, without incurring present risks and delays; there will be an increased demand for English manufactures, a greater safety for life and property will be secured, and Her Majesty's squadrons stationed in those waters will enjoy greater facilities for accomplishing the objects they have in view.

"The Island of Jamaica, situated in such a position that the proposed change will make it the gate of the Pacific, will be able to resume her former lucrative commerce with those countries and will eventually become a deposit for supplies of every sort.

"A little more than one month would suffice for a passenger from Australia to reach the coast of Peru or Chili, and one or two weeks more to embark upon the Atlantic, so that with the advantage of steam the whole voyage from Australia to England could be made in sixty or seventy days.

"If India has good reason to demand of England steam navigation, as it has, notwithstanding the

numerous obstacles to be overcome and the enormous expense required to accomplish it, surely the Western Colonies of Her Majesty's empire have some right to share in the patronage of the government, especially where there are comparatively no obstacles in the way and where the required subsidy will yield immediate returns.

"Western Mexico, which is probably destined to form a separate State, will send the produce of its rich mines to that point which nature seems to have indicated as the great route of communication with Europe. California, at present so isolated from the civilized world [this was written in 1836], will share in the reviving influence resulting from steam communication. The valuable furs of Northwestern America will find a new way of reaching the grand emporium of Europe, and even the distant regions of Kamschatka will not be excluded from the beneficial effects of the proposed change."

This paper of Wheelwright's was accompanied by a general plan of the operations of the proposed Pacific Steam Navigation Company, and of observations upon the Panama route, the trade of the Pacific, etc. In this plan were comprehended all the arrangements and prospects of the projected company, even to the minutest details, supplemented by

tables of statistics and arithmetical calculations. To it was appended a detailed account of the measures taken by the English merchants and residents of Lima, at a public meeting held at the British consulate, in August, 1836, with the report of a committee chosen to examine and ascertain the practicability and advantage of establishing stated intercourse with Europe by way of the Isthmus.

Espousing the extensive views of Wheelwright's *Plan* with the warmest sympathy, the *Times* adds its own opinion in the following words:—

"In regard to the benefits of steam navigation upon waters where that system has not hitherto been adopted, there can be but one opinion among those who are accustomed to reflect upon subjects of international communication or who have taken the trouble to look at a map of the world. But that the administration now in power should be induced to depart from the narrow policy to which it is pledged, and to lend aid to an enterprise, the great and glorious results of which it is too short-sighted to perceive, would be beyond the bounds of possibility. The plan cannot, however, fail to be carried into effect, although it will not be through any assistance from those political jobbers who now so misguide the helm of state."

The spirit of opposition to the administration which betrays itself in the language of the *Times* did not prevent the writer's presentiments from being exactly fulfilled, for only five years after, Wheelwright's plan obtained the co-operation of the English government.

Shortly after (May 30, 1838), the *Morning Post* took up the same subject, under the title of "Steam Navigation in the Pacific." Like its contemporary, the *Times*, it heartily supported Wheelwright's views and plans. Means were being taken at that time to establish a line of steamers between England and Brazil. "But," says the *Morning Post*, "one of the most important and promising enterprises of this kind has been set on foot by Mr. Wheelwright, of Boston."

Alluding to the work of the Hon. P. Campbell Scarlett, entitled "South America and the Pacific," the same journal copies from Wheelwright's paper, appended thereto, the following words, doubly interesting from the fact that time has proved their correctness, and that they are still capable of application:—

"The relation which Great Britain holds with respect to these countries cannot be viewed with indifference. Millions upon millions of British capi-

tal have been embarked in the cause of their independence without having yielded, as yet, any adequate returns. So far from this, accumulated interest has swelled these sums to an almost incredible amount. The complaints of the bond-holders are loud and clamorous, and they are even now on the point of appealing to the government to sustain their just claims upon those States. In the mean time, war and civil discord have continued their desolating career in South America, and a complete prostration of public credit has been the natural result.

"The causes which have brought about the present melancholy condition of affairs may be ascribed chiefly to the unfortunate system of government adopted by Spain for her colonies, and to the disastrous influence of war, which has given birth to a military spirit that defies all moral restraints. Every petty chief has become ambitious of power, and an extensive and sparsely inhabited territory has been advantageous to these revolutionary demagogues, whose designs have frequently been matured on account of the entire absence of speedy communication. The result is that those countries have been in a state of constant distraction and political insecurity entirely prejudicial to their welfare and prosperity, while the vast deposits of wealth with which

nature has so abundantly endowed them have remained permanently unproductive.

"No better method can be devised by which effectually to correct those evils than the introduction of direct and regular communication by steam. It is all the more desirable on account of the absolute want of easy communication by land, as well as the long and tedious voyages by sailing ships. By the establishment of a steam service the executive authorities would be rendered more vigorous in action and would receive an impulse and moral power they have not possessed hitherto; the germs of revolution would not have time to mature; the mineral and agricultural wealth would be developed, thus augmenting the public revenues; the spirit of social and commercial intercourse, so intimately connected with the moral and political progress of nations, would be stimulated; the interests of society will be better understood and promoted by the interchange which would be produced, and the depreciated credit of these republics would very soon be restored."

These memorable words of Wheelwright's have found their confirmation, after a lapse of thirty years, in the results of his enterprise. Here the character of the man discovers itself, — a character derived from that society where De Tocqueville and

Chevalier were inspired with the principles and doctrines which have made them famous.

The "Morning Post" closed its quotation with these words of Wheelwright, which have only the value of a simple but suggestive historical reminiscence : —

"The governments of Peru, Chili, and Bolivia have demonstrated a veritable liberality in behalf of an object so desirable as steam navigation on their coasts by the concession granted to the projector of an exclusive privilege for the period of ten years, with exemption from all port charges (one only excepted, which is merely nominal), which would have amounted under the present system to more than £20,000 annually ; a free use of receiving ships for deposits of coal, and free permits of entrance in Peru to those ships loaded with coal ; and a general obligation to facilitate the operations of the steamers."

Subsequently the "Morning Post" continues and concludes as follows :—

"English merchants residing in Peru and Chili have held several public meetings relative to the same object, and the result of their deliberations demonstrates that they are deeply interested in the success of Mr. Wheelwright's enterprise. For their reports and for various other particulars bearing on

the question we would refer our readers to Mr. Scarlett's very interesting volume. In concluding we have only to state that Mr. Wheelwright is a gentleman of well-known intelligence and ability. He has passed fifteen or sixteen years of his life in South America, during which time he has made careful surveys of the coast preparatory to the organization of a steamship company. He has also solicited from the governments of the Pacific republics concessions which have been recently granted him as a guarantee in behalf of the stockholders."

At the end of the same year, 1838, the "Morning Chronicle" of Nov. 10, treating of Wheelwright's project, in its article on "Money Market and City News," gave these particulars, which now occupy an interesting, prominent place in his biography and in the annals of the company which owes its existence to him.

With reference to this subject the "Morning Chronicle" has the following:—

"Within a few days we have seen in circulation the prospectus of a new steam enterprise, denominated the Pacific Steam Navigation Company, which has attracted much attention as being of general interest and importance. Its object is the establishment of a line of steamers on the western coast of

South America from Valparaíso to Panama in connection with a line from England to the West Indies and thence to the Isthmus of Panama. The Pacific Steam Company claim to shorten the present period of communication with that coast to two thirds of the time now required to make the prolonged and tempestuous passage to the Pacific by way of Cape Horn. The present enterprise will form a valuable link in the chain of extensive steam navigation between Europe and South America; and, as important privileges have been ceded to its worthy and indefatigable projector, it is to be hoped that the object will have the support and encouragement it deserves in view both of its commercial and general importance. It is unquestionably an inviting field for remunerative enterprise; but the greatest obstacles to the success of the company will be found in the want of good faith in the South American governments and in the jealousy of its native population."

. . . "The question of steam navigation on the Pacific has occupied the attention of many persons, and has awakened, in fact, considerable general interest, not only as opening a more expeditious route to the West Indies and the Pacific, but also because it will be the means of effecting a more

rapid communication with the East Indies, China, Australia, etc. A similar enterprise was long since proposed by *Mr. Fairburn*, but at that period his views were regarded as visionary and wholly impracticable. Now, however, we find the idea revived and sustained by men of great ability and of high rank. They all follow in the wake of Columbus, whose grand object was to discover a passage to the East Indies by the route now proposed. The Spaniards have, for centuries, carried on their commerce with China by way of Vera Cruz, Acapulco, and the Pacific."

In speaking of the first cost of the enterprise, the "Morning Chronicle" writes:—

"Mr. Wheelwright estimates the annual expense of four steamers of 450 to 500 tons each, one of them being held in reserve, at \$236,000, or £47,326; and the proceeds from three of these ships at \$466,950, or £93,390, leaving a profit of ~~£~~\$46,000 a year upon the business of the Pacific Company."

. . . "The capital stock of the company is to consist of £250,000, in 5,000 shares of £50 each, reserving 1,000 shares to be subscribed for in South America."

Another London journal, which gave Wheelwright's project an opportune and powerful sup-

port, was the "Railway Times." In its issue of Dec. 29, 1838, we find an article full of interest; but as it is only an eloquent repetition of that we have already read from other journals, we shall not give it at length. Like its contemporaries, the "Railway Times" reproduced word for word the various extracts from Wheelwright's pamphlet, as giving the clearest and most effective exposition of his plan.

A public meeting followed close upon these discussions of the press, to consider what measures could be adopted towards the formation of a company to carry out the proposed plan. This meeting took place in London, April 1, 1840, at the offices of Sir Edward Parry, who was chosen president. Among the large number of distinguished persons present on that occasion was Robert Fitzroy, who afterwards acquired a scientific celebrity in the English navy. The president read a memorial prepared by Wheelwright, with the ultimate design of laying it before Her Majesty's government, provided its importance should secure the subscription which was to be solicited from the public, after it had been adopted and indorsed by the meeting. This memorial, it would seem, had only an indirect connection with the South American project. Yet no

better means could have been employed for obtaining the support of the British government than to appeal to its interest in any scheme for shortening the distance between England and her colonies in Southern Asia.

Who in effect drew up the petition contained in this memorial? British merchants and others interested in commerce with Her Majesty's colonies in Australia. What did the memorial contain? It set forth "that the measures adopted by Her Majesty's government for the establishment of steam communication with the English colonies of the West Indies and North America were worthy of the profoundest gratitude; that her colonies in New Zealand and Australia, which were entitled to share that protection from the importance they had attained, were suffering on account of their isolation from the mother country, for want of regular and speedy communication; that any measure to improve their condition in this respect would be desirable in the extreme; that the Western route to these colonies, although new, was the best means of obtaining the desired object; and as Her Majesty's government had already a line of steamers to the Isthmus, nothing was needed to perfect it but to establish mail packets on the Pacific Ocean, reducing by one half

the time in which the voyage is now made by the Cape of Good Hope."

What connection had this measure with Wheelwright's project? It is easy to see that bringing England into communication with her Asiatic colonies by way of Panama would, in reality, accomplish his object itself. It may indeed be said that the success of the whole plan turned upon that very point,—the inauguration of a new route by which the English mail would be saved the delays and inconveniences of the voyage, either by way of Cape Horn or the Cape of Good Hope. To deliver the English mail at Panama, that is on the western shore of the Isthmus, was to deliver it in the five Republics of the Pacific, united as they would be by the projected steam line. This memorial having been followed up by others from British merchants, resident in South America, whose petitions were framed in their own interest as well as that of Great Britain, the project was at length fairly started on the road to its ultimate success. This, however, was not reached until after years of struggle, during which Wheelwright continued to meet and overcome new and unlooked-for obstacles.

CHAPTER XI.

FORMATION OF THE PACIFIC STEAM NAVIGATION COMPANY. — CONSTRUCTION OF THEIR FIRST STEAMER, AND THEIR DEPARTURE FOR CHILI. — THEIR ARRIVAL IN THE PACIFIC.

WHEELWRIGHT'S efforts in London resulted in the formation of an association to introduce steam into the waters of the Pacific, under the name and title it now bears, of the "Pacific Steam Navigation Company," the royal charter or patent having been previously obtained; for without it such a company could not then have been formed in England according to British law.

Meanwhile, the steamships of the company had already been built at Bristol, agreeably to Wheelwright's directions, requiring that they should be adapted to trans-Atlantic navigation, as well as to coastwise voyages, which he understood better than any one else.

Having been appointed by the directors of the company superintendent-in-chief of their steamers, he proceeded with them to their destination, and arrived in the Pacific by the Straits of Magellan

(this fact, as has been observed, being of itself an important precedent in the annals of navigation) during the month of October, 1840. We must read in the journals of that date the description of their first appearance in the ports of Valparaiso and Callao :—

"Yesterday afternoon (says the "Mercurio," of Valparaiso, of Oct. 16), about three o'clock, a salute fired by the ships at anchor in this port announced the arrival of the steamers 'Chile' and 'Peru.' They have met with a reception worthy of the object which brings them to us. The military bands of the city being embarked on several launches went out to meet them, accompanied by a multitude of boats belonging to the various ships of war lying in the harbor. Besides these there proceeded from the city numerous other launches and boats crowded with spectators, who, notwithstanding the wind that prevailed, were anxious to have a nearer view of the ponderous ships which moved without aid of sail or oar. Both steamers having crossed and recrossed the bay in different directions, and having received the salutations of the immense multitude attracted by a spectacle altogether novel in these waters, at length anchored,—the one near the Mole, and the other

opposite La Cruz del Rey. The steamers being of equal dimensions, we shall give those of the 'Chile': She is 180 ft. long, 30 ft. wide, and draws 15 ft. of water; is coppered and copper fastened; has two masts, and her engines have each 100 horse power. She has copper boilers, and her engines are on the low-pressure system. She has cabin accommodations for 150 passengers, and for a still greater number on deck. She can carry 300 tons of freight."

An eye-witness in describing the same event said:—

"We saw Mr. Wheelwright for the first time on the day the 'Chile' and 'Peru' arrived in the harbor of Valparaiso. More than four thousand people had collected on the hills surrounding the bay to witness the entrance of the first two steamers of the Pacific Steam Navigation Company. As the 'Chile' came into the harbor she crossed the bay from one extremity to the other that the people might have a better view of her elegant proportions; and at the same moment Mr. Wheelwright appeared on the quarter-deck, and hat in hand saluted that delighted assembly, which, amid the ringing of bells, the music of the bands, and the salvos of artillery, greeted with noisy hurrahs the energetic projector who had thus opened

for the free States of the Pacific a new era of progress and prosperity. That day was beyond doubt the grand triumph of Mr. Wheelwright. He had overcome the greatest obstacle of all, and from that time his reputation, his fame one might say, was assured." — *La Republica of Buenos Ayres of November, 1873.*

In our view the solemn installation of steam traffic in the Pacific by this noble soldier of industry is an act worthy of greater admiration than the assumption of the sovereignty of the South Seas by Vasco Nuñez de Balboa, or than the victories which secured the liberty of those seas won by Cochrane and Bolivar.

CHAPTER XII.

ARRIVAL OF THE STEAMER "PERU" AT CALLAO.

THE reception which the steamer "Peru" received at Callao is not less worthy of mention.

"Yesterday" (said the "Comercio" of Lima) "the city presented a scene of activity and excitement such as is seen only on our great civil holidays. Every one who could went to Callao either on horseback or in carriages. Omnibuses, coaches, everything on wheels, even to the old-fashioned volantes, were taken up, and at nine in the morning not a seat in any sort of vehicle was to be obtained for the highest price. The 'Peru' was constantly full of visitors, and at no time during the day from eleven o'clock, A. M., were there fewer than two hundred persons on board."

"Oh, that some one would begin in earnest to make the railway to Callao!" said the "Comercio" that very day, without suspecting that Wheelwright himself would be the originator of that work.

A visit from the President of the Republic to the steamer "Peru" was the prominent feature of

the celebration. The description of it in the "Comercio" of the following day finds a place here :—

"The agents of the Pacific Steam Navigation Company having become aware that His Excellency proposed to visit the 'Peru' on last Saturday, the ministers plenipotentiary, the foreign naval officers, the different consuls, as well as many other public authorities, were invited to accompany the President of the Republic to the steamer. At half-past twelve, P. M., His Excellency embarked with all his retinue in the midst of salutes fired from the forts, which were answered by the guns of the steamer. Having been welcomed by music from a band stationed on board, they went immediately to the saloon, and from thence to examine the machinery, whose ponderous apparatus evoked the greatest admiration from all the visitors. Greater still was their pleasure when the ship was put in motion in the midst of salvos of artillery which were fired at this moment from the foreign ships of war. An immense concourse of people, gathered on the mole, the balconies and roofs of the houses, and on the long line of earth-works, were watching the ease and grace with which the 'Peru,' at the rate of nine and one half miles an hour, was steaming towards

the Island of San Lorenzo. In the mean time, a splendid banquet was being served in her principal saloon, at which more than a hundred gentlemen were seated."

Toasts and speeches followed. According to the "Comercio," Wheelwright said that "feeling sensibly the honor of having at the table of the steamer 'Peru' His Excellency the President of the Republic, who had given to the enterprise of steam navigation his protection and had furnished it with every facility, he could do no less than offer a toast to the health of His Excellency, Gen. Gamarra, and to the prosperity of Peru. Gentlemen," he continued, "having been fully convinced for a long period that there was no sea more propitious to steam navigation than the Pacific Ocean, on account of the smoothness of its waters, nor any part of the world where it was more needed than on this coast, inasmuch as communication by land is rendered so difficult by the rugged and mountainous character of the country, I have devoted myself for the last six years to the promotion of this enterprise, which to-day we see accomplished through the efforts of the Steam Navigation Company." After giving a rapid sketch of the political and commercial advantages resulting from the introduction of steam, Wheelwright pro-

ceeded to say "that it should be kept in mind that by it these countries were destined to be placed on the highway between Europe and Asia. It has been admitted by Sir Robert Parry and other distinguished persons in London that the shortest route from England to Australia is by way of South America, which fact renders it probable that England will lend her aid to extend steam navigation to her colony; and in that event this country will undergo a wonderful and favorable change, occupying, as it will, a place midway between the two portions of the civilized world."

The president immediately rose, and in a feeling and eloquent speech said "that, admiring the perseverance, promptness, and persistence of Mr. Wheelwright in his efforts to establish steam navigation in the Pacific, he desired for this undertaking the most prosperous results, that thus it might serve as a stimulus to other foreigners to introduce among us, with other new enterprises, all their means of civilization." — *The Comercio of Lima, November, 1840.*

CHAPTER XIII.

DIFFICULTIES WITH WHICH THE ENTERPRISE HAD TO STRUGGLE IN ITS FIRST ESTABLISHMENT. — THE LIFE OF WHEELWRIGHT A PROLONGED COMBAT WITH THE SPANISH COLONIAL SYSTEM. — WANT OF COAL, WHICH RESULTS IN THE OPENING OF THE MINES IN CHILL

THUS steam navigation was permanently established on the Pacific in the year 1840. But all was by no means accomplished. Communication by the company's steamers having been effected only between the two points of Valparaiso and Callao, it was now necessary to extend it to Panama, in order to carry out the plan of connecting Europe with South America by the Isthmus. But the extension was not completed till 1845, the intervening five years having been spent by Wheelwright in continuous and persevering efforts to finish his work in the face of numerous and formidable obstacles. Chief among these was the monopoly of a line of French sailing packets which aimed to control the navigation of that portion of the coast between Panama and Callao. To this was added the indifference which New Granada (being on the Atlantic as well as the Pacific)

manifested towards the steam line of such vital importance to its neighbors on the Pacific.

This interval was not wholly lost for Wheelwright's purposes. He employed it in organizing and regulating the service of the new steam communication, which was not the work of a day in countries and on coasts so imperfectly prepared to respond to its exigencies. In his character as principal superintendent of the Pacific Company, he constructed a code of *Rules and Regulations for the Agents in the Intermediate Ports*, announced in a circular of the 10th of December, 1840. It was the first of many efforts of this sort to establish the organization at present maintained in the interior working of the Pacific Company's service. But new and great difficulties still awaited him in the progress and final development of his enterprise.

The career of Wheelwright presents this characteristic peculiarity, that he no sooner overcame one difficulty than he was confronted by another, and had to go on struggling as before. His labors as projector were so many public improvements for that country, born one of another in regular sequence and having a logical connection. His works, therefore, give a unity to his life, for they were all subservient to one controlling interest, namely, to institute a

reform among a people who had formerly been the wretched subjects of Spanish policy, and who still maintained its customs and prejudices.

The obstacles encountered by the enterprise after the arrival of the first two steamers in 1840 were numerous and embarrassing in the extreme. But from every disappointment there resulted some positive advantage, thanks to the inventive and fertile genius of its originator.

The want of coal (the vessels which were to bring it from England having failed to arrive) was felt to such a degree as to place the undertaking in jeopardy at the very outset. The fine ships of the company had been lying at anchor, at their respective ports, for nearly three months. To be obliged to wait for coal from England, and when it did arrive to pay the price consequent upon the long voyage, was to purchase speed at more than double its value.

It was a well-ascertained fact that throughout that coast, but principally in the south of Chili, there existed natural deposits of mineral coal. Its quality, however, remained unknown for want of being tested. No practical necessity had demanded its analysis. In tropical climates the charcoal, so easily obtained, is fully adequate to domestic needs. Mineral coal was not required in factories, for the simple reason that

manufacturing industry did not prevail to any extent ; neither was it demanded for locomotion or for the manufacture of gas. Science, confirmed by the practical testimony of the people themselves, had raised a doubt as to its adaptability to any of these purposes. An opinion which condemned it as worthless has been attributed to Darwin, a great geologist of this century, who investigated the geological formation of the soil of Chili.

The crisis which threatened the life of the steam enterprise furnished the occasion of resolving all doubts, in a manner described by Wheelwright himself, in a letter dated Oct. 20, 1841. "The want of coal was the first stumbling-block to the enterprise on the arrival of our ships in the Pacific. After the most brilliant inauguration I had the unhappiness to see those beautiful vessels lying at anchor for nearly three months. I proceeded immediately to the south of Chili, when, after some months of labor, I had the good fortune to find valuable coal at a minimum cost. The mines had never been thoroughly worked before, and the coal which had been taken out was from the surface, and of a poor quality. . . . I have not the slightest doubt that we shall find as good coal here as that mined in England. The whole southern section of Chili contains coal in inexhaustible quantities."

With reference to the same subject, Wheelwright wrote from Talcahuano to the National Institute at Washington, of which he was a member, the following account, which has a permanent value : —

"In discharge of my duties as Superintendent of the Pacific Steam Company, I have been induced to work the mines in this vicinity during the last eighteen months to obtain coal for the use of the steamers. . . . I selected the *Morro* of Talcahuano as the most desirable point for the attainment of the object, and there I began mining the coal which has been employed with the best possible results in our steamers during the past eighteen months, and up to this time (Sept. 11, 1842) 4,000 tons have been taken out. This coal is not so dense as the English. It burns freely and produces a great deal of ashes, which are light in their character, and it does not clinker on the grates."

From that time this product took a high rank among the natural resources of Chili. It is more valuable even than her silver, because it is a great element of force, a powerful engine of civilization, which must affect the future destinies of that State — as well as of every portion of the Southern Continent. Even if Wheelwright had rendered no other service to Chili, this alone would entitle him to a place among her benefactors.

CHAPTER XIV.

ACCIDENT TO STEAMER "CHILE," WHICH DEVELOPED THE RESOURCES OF THE PORT OF GUAYAQUIL. — OTHER EMBARRASSING DIFFICULTIES. — VARIOUS IMPROVEMENTS WHICH WHEELWRIGHT INTRODUCED INTO THE DIFFERENT PORTS OF THE PACIFIC.

THE difficulty of procuring coal having been overcome and the trips of the steamers resumed, an unexpected accident demonstrated to the company the arduousness of the task of establishing steam navigation on coasts so imperfectly prepared for it; but the energy and perseverance of Wheelwright converted this untoward circumstance into an occasion of a new success. About ten leagues from Valparaiso the steamer "Chile" had almost miraculously escaped being totally wrecked; for, having struck upon a reef, she was damaged to such an extent as to make it necessary to put into port for repairs. Unfortunately Valparaiso was destitute of resources for that purpose. Wheelwright, who was well acquainted with all the ports of the coast, knew that that of Guayaquil was the only one where the neces-

sary repairs could be made. From thence he wrote shortly after, "I am here overlooking the repairs of the steamer, which I hope will be finished in a few days. This is the only port where such work could be done, and it presents as great facilities for this purpose as any other in the world destitute of a regular dock-yard." On this same occasion he wrote to his correspondent as follows, "To give you an idea how well adapted these waters are to steam navigation I will just mention the fact that we have made trips along the coast, touching at ten ports, without varying a quarter of an hour from our schedule time."

Guayaquil, however, was at that time north of the track navigated by the steamers, which hitherto had only sailed between Valparaiso and Callao. Until the service should be extended to Panama, the original design of establishing direct communication with Europe by way of the Isthmus would remain incomplete. Five years were to intervene before Wheelwright was able to fill up this blank; but, as we have said before, the time was by no means lost; for besides his unwearied efforts in procuring the extension of the line, he busied himself in making improvements along the coast and increasing the facilities of the harbors.

It took time, also, to domesticate, so to speak, the new enterprise among a people habituated for centuries to slow and irregular means of communication. Improvements are not produced abruptly in countries so backward and undeveloped; on the contrary, they generate one another, and are linked together in a natural order of sequence.

To introduce steam and the telegraph among a people who had never had an idea of the value of time was like beginning at the end, — a process which has its own laws of development. Steam and electricity are so much the outgrowth of a state of general progress that their sudden application, under primitive conditions, is absolutely negative in its beneficial results. A message which has employed a minute in traversing 1,000 leagues requires eight days to travel ten rods from the office where it has been received to the place of its destination. Even now news from Paris reaches Valparaiso in six or eight hours, while telegrams from Caldera and Concepcion occupy six or eight days in their transit over the wires under the control of the State.

Steam and the magnetic telegraph, like liberty, necessitate a certain amount of education, a degree of progress. The want of great speed led to their invention by a people who had previously made use

of the proverb, "Time is money." This aphorism, which for one of the Latin race is only a metaphor, is for an Anglo-American a mathematical equation.

The steam enterprise having been fairly launched, there were certain inevitable requirements to be fulfilled before its success could be assured. Among these may be enumerated facilities for coaling, precision in operation and service, promptness and dispatch in the office-work of trade, the improvement of ports and coasts, their survey, and the production of good charts for their navigation, the construction of lighthouses and wharves, of buoys and dredges in the different harbors; and lastly, an entire reform in the postal, custom-house, and police regulations.

Wheelwright, not unaware of all this, with his habitual patience and prudence applied himself to the promotion of conditions so indispensable to the success of his undertaking. We see him, therefore, during the first years after the introduction of steamers, engaged in works of internal improvement, which, notwithstanding their diversity, were all in accordance with the general design of guaranteeing the continuance and multiplying the beneficial effects of the new system of communication.

The smaller ports of Peru having been closed to

steamers they could not enter that of Iquique, which came under this category. Yet the recent exportation of saltpetre had made this port one of the most important on the coast, and such a prohibition was therefore prejudicial to the interests of its inhabitants as well as to those of commerce at large. The superintendent of the steamers represented this circumstance to the Peruvian government, and succeeded in opening Iquique to all foreign vessels.

The harbor of Valparaiso, the emporium of the Pacific, had at its entrance an almost worthless lighthouse, which rendered its approach by night very dangerous. In the general interests of the country as well as in that of the steamers, Wheelwright brought the subject before the authorities of Chili, and procured the erection of a new and magnificent one in its place.

The prompt dispatch of the steamers required an abundant provision of coal in the ports along the coast. Most of these ports being entirely destitute of wharves, whereby coaling would have been facilitated, Wheelwright had to supply this defect by depositing the coal required in receiving-ships. The want of moles, however, did not prevent the levying of wharfage dues, and the custom-house of Coquimbo exacted these from the steamers for the privilege of

taking coal from their own receiving-ships. This tax amounted to enormous sums. A representation which Wheelwright made to the government secured from it a decree that the receiving-ships of the company should not be considered as public moles, nor the coal supplied from them as subject to the custom-house regulations with regard to reshipment.

In Callao he obtained from the Peruvian government in 1842 the lease of a lot of land, and the permission to erect on it a building for iron work necessary to the repairs of the steamers. He also secured the privilege of having deposits of coal where the steamers might get their supplies, and at the same time be exempt from paying charges for wharves which they did not use. The government also granted him a concession whereby the coal deposited on shore should enjoy the same privileges as had been conceded to that on board the receiving-ships.

He also solicited and obtained from the government of Peru another change, which was for the public interest, namely, that the minor port of Lambayeque should be allowed to export bullion on the same terms as that of Iquique. It was also decreed, at his request, that the tonnage of the steamers in the port of Callao should be understood

to mean the amount of cargo they carried rather than their measurement, in view of the fact that the machinery and the coal occupied a large portion of the hold.

In short, there is scarcely a port on that coast into which he did not introduce harbor facilities of one sort or another, besides effecting in the cities themselves many improvements, to which we have previously alluded.

CHAPTER XV.

DIFFICULTY OF EXTENDING THE LINE TO PANAMA,
ARISING FROM THE EXCEPTIONAL SITUATION OF NEW
GRANADA.

NOTWITHSTANDING all the advantages secured for the line, its unfinished condition placed the whole undertaking in a most precarious situation, — in fact, on the verge of ruin. The Pacific Steam Navigation Company had not been formed merely for the purpose of establishing speedy communication between two distant South American ports. In order to fulfil the original design of an international line, it was imperative to extend the route to Panama.

Two years had elapsed since the payment of the capital, and as yet nothing had been realized by the company in proportion to its expenses. The London stockholders were not philanthropists, who could content themselves with the bare idea of promoting the progress of these Pacific States at their own private expense; and they might demand of the directors the withdrawal of the steamers from service so barren of revenue.

Wheelwright saw the danger which threatened the company, and in order to avert it at once he appealed to the interest which the governments of the Pacific had in the successful result of the enterprise. He therefore asked from them the protection it was in their power to give by abating one half the duty levied upon silver shipped on board the steamers.

But to fill up the blank existing between Callao and Panama was no easy task, and it might appear almost an impossible one in view of all the opposing circumstances. It is scarcely necessary to say that these proceeded chiefly from the governments of those States whose capital cities were situated on the eastern slope of the Andes, or rather on its elevated table-lands, and which belong to the Pacific only in name. Such were Sucre, capital of Bolivia, Quito, capital of Ecuador, and Bogota, capital of New Granada. Inhabiting the haunts of the condor in the mountains, those three States, created by Bolivar, saw, as he did, the liberty which enriches nations, not in the seas, but in the heights of the Andes; that is to say, not in communication, but in isolation, — an isolation which differed from that of colonial times only in that it was one of their own choice. A curious toast of Bolivar, given at a banquet on the sum-

mit pass of Potosi, after Ayacucho, betrays the economic policy which has been maintained in those countries ever since that day: "The glory of having brought to these cold regions the standard of liberty renders valueless all the gold beneath our feet."

That poetry may be translated into prose by the economist thus, The glory of having brought to these cold regions the standard of liberty renders valueless liberty itself, which we tread beneath our feet. Gold in fact is liberty, because it is power. It is, however, only a symbolic power, symbolic of wealth, that is, the means of securing what is useful in life.

But there is no wealth where there is no production; and there is no production where there is no traffic, no way of communication; where there is, in one word, no level. The most perfect level is the sea, which is the highway of the world. These governments and capital cities, situated fifteen thousand feet above this king of highways, from which they are separated by the wall of the Andes, are as remote from modern America as Spain was by her distance. An exceptional part of those countries among the clouds is the Isthmus of Panama, which is one of the world's thoroughfares, and on that narrow strip of land has been fought the battle between modern progress and the obsolete regime of the past.

Here Wheelwright, the pioneer of this progress, had to struggle against the monopoly of a defective system of navigation between this point and Callao, already granted to a French company, which, with their sailing ships, required forty days to make the distance he proposed to accomplish in one fifth of that time. The French company urged, as an argument in favor of their claim, the fact that New Granada being for the most part an Atlantic State, she already possessed direct communication with Europe through her northern ports, and that therefore she had no interest in the new steam project of such vital importance to her neighbors on the Pacific. To endorse such a sentiment as this was somewhat unworthy of a country where had been held in 1826 the first congress for the purpose of considering the practicability of combining the two Americas.

Happily the opposition of the packet-ship company could not long be maintained against steam, in the navigation of a sea where incessant calms are so prejudicial to sailing vessels. Hence it was that an arrangement, reconciling the conflicting interests, was effected, which put an end to the difficulty. It had, however, already been partially overcome in another way. The discovery of gold in Cali-

fornia and the annexation of the latter to the United States subserved the plan of Wheelwright by bringing to it the interested and powerful co-operation of that country, whose unity demanded direct communication with its new State on the Pacific. Soon after its formation a treaty negotiated between New Granada and the United States assured the regular and prompt transportation of the correspondence of the latter across the Isthmus of Panamá. Such a concession having been granted, the government at Bogota could not well refuse equal facilities to an English company.

The moment had then arrived for Wheelwright to inaugurate a new campaign, both in America and Europe, in order to secure the completion of the line between Valparaiso and Panama.

CHAPTER XVI.

FRESH ENCOURAGEMENT DERIVED FROM PUBLIC OPINION IN OVERCOMING NEW DIFFICULTIES.

THE South Americans, who were in reality most interested in the completion of this work, threw so many unexpected obstacles in its way, that the stockholders in Europe began to doubt Wheelwright's ability to finish the work he had commenced. Moreover, the question of his position as chief superintendent of the company was involved by a measure of neutrality adopted by him, regarding members of different political parties who might be passengers on board the steamers. This impartial course gave general satisfaction; but there were not wanting those who put an unfavorable construction on the measure, and made it an occasion for misrepresenting him to the company.

In response to Wheelwright's request, and in view of the situation of his enterprise, the foreign merchants on the Pacific coast and their principal diplomatic and consular representatives took intelligent and appropriate action, by passing resolutions in his

honor, on the eve of his departure for England. These are embodied in the documents which we here insert, in testimony not only to the worth of the men, but to the enlightened ideas of those who framed the resolutions.

The recommendation which the diplomatic and consular corps in Lima gave Wheelwright as chief superintendent of the steamers in the Pacific, is as follows : —

"We, the undersigned, of the diplomatic and consular corps, resident in this city, knowing both personally and by reputation Mr. Wm. Wheelwright, chief superintendent of the steamers of the Pacific Steam Navigation Company, are able to give, and do give by these presents, the most ample testimony to his upright and honorable conduct in every respect, and to his well-known and acknowledged ability to discharge the duties of the important office with which the company has invested him. His conciliatory arrangements, and his entire independence of the politics of these States qualify him in a peculiar manner for the superintendence of the steamers. His long residence in the countries lying on this coast and his numerous and influential friends give him advantages which very few possess, and we feel sure that the stockholders of the company could not

have chosen any one as principal agent who would have given more general satisfaction, nor one possessed of greater ability to promote the interests in which they are concerned.

"And it is with sincere pleasure that we bear testimony to the well-known name and capacity of Mr. Wheelwright, cherishing, as we do, the most earnest desires for the success of this enterprise, in which all the civilized world is so deeply interested, and which concerns so nearly the different countries we respectively represent."

"LIMA, October, 1841."

(This paper was signed by the different ministers plenipotentiary, diplomatic and consular representatives, then residing at Lima.)

In February of the year 1842, at a meeting of the Commercial Exchange, together with other residents of the city of Valparaiso, over which presided the Hon. John Walpole, *chargé d'affaires* of H. B. M. in Chili, and Messrs. Henry Wm. Rouse, consul-general of England, and Henri Blanchard, French consul, the following resolutions were read and unanimously adopted:—

"We, the undersigned, in view of the fact that Mr. Wm. Wheelwright, superintendent-in-chief of the

Pacific Steam Navigation Company on this coast, is about to leave the country for England, and that therefore the time has come when the commercial community and other residents of this city should manifest in the most explicit and decisive manner the high opinion they have formed of his ability in the promotion of an enterprise so important and useful, resolve :—

"*First.* That this meeting do honor to Mr. Wm. Wheelwright for the enterprising spirit and indefatigable zeal with which he has inaugurated and established steam navigation in the Pacific, even under the most adverse circumstances :

"*Second.* That this meeting manifest to Wm. Wheelwright its admiration of his management since the arrival of the steamers on this coast, and more particularly of the course he has adopted, with reference to the governments of these different republics, pursued with so much good judgment and in a manner so conciliatory and impartial, as to enlist the protection and respect of which he has so justly been the object :

"*Third.* That this meeting is of the opinion that in view of the frequent political disturbances which take place in some of these countries and in which thousands of their inhabitants find themselves in-

volved from one cause or another, the measure adopted by Mr. Wheelwright for receiving on board the steamers passengers without distinction of party, should be regarded as just and proper, securing, as it does, the approval of the citizens of those countries ; since the exclusion of political partisans would not only injure the interests of the company but would make it exceedingly unpopular :

"Fourth. That this meeting recommend all bondholders who have not agents of their own in England to give a power of attorney to Mr. Wheelwright, that he may vote for them in the meetings of the stockholders which shall be held in that country ; inasmuch as the members of the present meeting are persuaded that the opinions expressed by him thus far should be put into practice, as most conducive to the favorable result of the enterprise :

"Fifth. That a committee composed of four individuals be named to draw up a memorial expressive of the respect and esteem which this meeting entertains for Mr. Wheelwright, and in order to make this expression most unequivocal and lasting, that his portrait be placed in the hall of the Exchange as a token of the high estimation in which he is held, and that it may serve at the same time as a stimulus to those who after him shall devote themselves to the

introduction from Europe of inventions, useful and advantageous to the New World :

" *Sixth.* That the committee be authorized to use the money which may be collected to carry into effect the preceding resolution, such collection being made by subscriptions from those who compose the present meeting, and from others who wish to co-operate with them :

" *Seventh.* That to the portrait shall be affixed an inscription, embodying the resolutions of this meeting :

"It was subsequently agreed that the committee referred to in Article 5 should be composed of the following gentlemen: Messrs. E. Linch, Joseph Waddington, Henry Ward, and Vicente Sanchez, who were requested to carry into effect the preceding resolutions, as well as to send a copy of them to the Directory of the company in London.

"(Signed) JOHN WALPOLE, *President.*

"J. M. BASCUÑAN, *Secretary.*"

The recommendation which all the foreign merchants in Lima give to Wm. Wheelwright, as superintendent-in-chief of the steamers of the Pacific Navigation Company, was as follows: —

"We, the undersigned, foreign merchants resident in

this city, being well acquainted with Mr. Wm. Wheelwright, superintendent-in-chief of the steamers of the Pacific Steam Navigation Company, are competent to give, and we do by these presents give, the most ample testimony to his upright and honorable conduct in all respects, as likewise to his entire fitness and thorough capability for the discharge of the important duties intrusted to him by the company. The persistent zeal and skill which Mr. Wheelwright has manifested in the strict observance of an undeviating course, avoiding all compromise in difficult cases which have occurred, his upright and honorable administration, his conciliatory and polite manners, his absolute withdrawal from the politics of these countries, enable us, unhesitatingly, to declare him to be the most suitable, by the peculiar advantages which he unites for the discharge of the duties of superintendent of the line of steamers; believing, as we do, that the commencement of this enterprise, and its prosperous development until the present time, are due entirely to his constant and well-directed management.

"His long residence on these coasts, and his numerous and influential acquaintance afford him advantages which are within the reach of few, and we entertain the opinion that the Pacific Steam Naviga-

tion Company could not have made a better choice in the selection of a general agent.

"It is therefore with the most perfect sincerity that we affirm his continuance in this office to be of vital importance to the final success of this hazardous enterprise. Animated by these sentiments, as well as by an ardent desire for its completion, we bear testimony to the well-known character and talents of Mr. Wheelwright and to his honorable and correct mode of proceeding on every occasion.

"GIBBS, CRAWLEY & CO.,

"MACLEAN, ROWE & CO.,

"ALSOP & CO.,

"FRED HUTH, GRUNING & CO.,

"ETC., ETC.

"LIMA, October, 1841."

CHAPTER XVII.

REMOVAL OF DIFFICULTIES.—THE LINE EXTENDED TO PANAMA AND THE NEW ROUTE ESTABLISHED.—BENEFICIAL EFFECTS OF THE CHANGE.

HIS new efforts having one after another been crowned with success, there appeared in the "Morning Post" (of the 29th May, 1844) the following letter from Wheelwright addressed to that journal, or rather to the public through the medium of its columns:—

"LONDON, May 1, 1844.

"*Sir*,—Permit me to inform you that I have entered into arrangements for the establishment of a monthly steam service between Panama, Guayaquil, and Lima, and that measures will be taken to act in concert with the steamers which carry the royal mail to the West Indies.

"I have thought it well to make this announcement that it may be transmitted to Australia, New Zealand, and the islands which form the Eastern Archipelago, in order that the residents of these remote countries may be prepared to take immediate

advantage of the intercourse now existing between them and the western coast of America, which will open to them a new and expeditious route to Europe.

"The inauguration of the proposed line will undoubtedly attract the attention of many who have occasion to visit China. The voyage will be found to be a most agreeable one, and in case the communication across the Isthmus of Suez should be occasionally interrupted from political causes or sanitary regulations, advantage can be taken of this route.

"The steamer which will ply between Panama and Lima will have accommodations for one hundred passengers and for two hundred and fifty tons of freight. An office will be established upon the Isthmus, with a view to facilitating the transportation of merchandise and bullion.

"It is expected that this new line will be opened about the beginning of the year 1845.

"For further details I must refer to the schedules, which will soon be issued, containing the tariffs of freight and passage in the currency of the Pacific States.

"I am, sir,

"Your obedient servant,

"W. WHEELWRIGHT."

Thus, in 1845, we find established, although not in perfect working order, steam communication between Chili and Europe, *via* Panama, which Wheelwright projected in 1835, and to which he had devoted ten years of intelligent and patient labor. It was no small thing to establish a line of steamers, where not even a solitary steamer had ever been known by sight.* But to organize such a line in remote and isolated waters, and convert it into a mail service of the first maritime nation of the world, was a prodigy of skill. In obtaining the privilege of conveying the royal mail, Wheelwright secured for the steamers of the new Pacific Company all the prerogatives and immunities pertaining to that right. The greatest and most beneficial results were to follow in the social and economic system of the Republics of South America, by introducing the modern postal service, with its regularity, precision, and sacredness, into countries educated under the Spanish régime, which never imagined that private correspondence could be considered as inviolable by the king's officers.

*When the first steamer passed by Cobija, a port of Bolivia, the local authorities notified their chief that a ship on fire was seen in the distance that morning, in aid of which a boat was dispatched with four rowers, but the current was so strong that it was impossible to reach it. The affair was dismissed by commending the victims to the mercy of God.

One of the first effects of this advantageous change was felt almost immediately at Panama. The liberal government of Bogota, glorying in having planted the standards of liberty at a height of fifteen thousand feet above the level of both seas, haughtily demanded that the colors of other nations should be, as it were, *trailed* across the soil of the Isthmus by imposing on their correspondence an exorbitant tax for the privilege of passing over their territory. The obsolete transit duty, which had everywhere been abolished, so far as merchandise was concerned, was thus transferred to the international correspondence coming into or going out of the State of New Granada. In consequence of the legitimate complaints of the foreign merchants, resident on the Pacific coast, and armed with the intelligent influence of the British government, Wheelwright succeeded in inducing the official authorities at Bogota to abolish that postal custom-house, which was equivalent to an indirect prohibition of the Isthmus as a public way. The abrogation of the tax having been accomplished, letters to and from Europe were allowed to pass for the future without paying duty over what had now become neutral territory in this respect. In fact, the entire postal system of these countries underwent a thorough reform, its tariffs, its security,

the regularity of dispatch and distribution having been remodelled on the European plan.

For the first time was known in those States, constantly at war with one another, a respected neutrality, thanks to the flag and prerogatives given by the British government to the steamers of this company. More than once the governments and the conflicting parties of those republics demanded that their political enemies should not be permitted to embark as passengers. Wheelwright, in his character as superintendent, firmly resisted this barbarous exaction, maintaining the principle, now everywhere recognized, that persons embarked under a neutral flag shall enjoy security of life and property. Thus he succeeded in making of the steamers under his control what he made of the American consulate at Guayaquil,—an asylum for all those who were persecuted for the crime of holding opinions contrary to those of the government. In countries whose normal condition is one of wars and revolutions, and in which escape is rendered impossible for want of roads, the advantage of having at their doors the protection of a great neutral flag is of inestimable value. We can only imagine what might have taken place if, instead of the English steamers, the service had been performed by private packet ships under

the flags of their respective States, or under those of the second-rate powers of Europe.

The security for the transportation of precious metals, which resulted from the establishment of the Pacific Navigation Company, was another great benefit conferred on the commerce of those countries, inasmuch as it occasioned a decline in exchange as well as in the premium of insurance.

Promptness of dispatch on the days fixed for the departure of the mails was a thing unknown in these ex-colonies of Spain, educated in habits entirely foreign to the strict requirements of trade, since the caprice of a sea-captain, or the influence of a powerful personage, or, above all, the arbitrary will of the government, were frequent causes of indefinite delay. English precision, however, was engrafted upon the customs of those countries only by maintaining a continual conflict with difficulties, arising from the indolence and the traditional procrastination of their inhabitants.

The comfort and convenience of travelling by sea, which resulted from the establishment of steamers, contributed greatly to the health of passengers on those tropical coasts, where exposure to rain and sun, unwholesome food, and ill-ventilated cabins were often the causes of fevers and other diseases.

It is scarcely necessary to speak of the saving of time and money, of the prevention of numerous annoyances, as well as dangers, which the Pacific States owe to the introduction of steam. The management of the powerful English company inspired such respect and confidence, as to abolish by degrees the impertinent exactions of the old system of maritime police.

Instead of breaking up the coastwise trade, as was feared by many, the steamers imparted to it, on the contrary, an impetus and development wholly unexpected, thus furnishing another proof of the fact that extensive ways of communication, whether by land or sea, give rise to others subsidiary to them.

CHAPTER XVIII.

INFLUENCE OF WHEELWRIGHT IN THE CONSOLIDATION AND DEVELOPMENT OF THE NEW ENTERPRISE.

ALL the benefits, following as natural consequences the introduction of steam, would have been lost without an intelligent and vigilant direction in the administration of the great enterprise. The advantages obtained hitherto were insufficient to guarantee its stability, so long as a powerful party favored a retrograde movement. Wheelwright well understood this, as did also the Directory of the company in London, and after the ten years spent in establishing the line of steamers, he had yet to devote ten years more to its consolidation. He persevered, not from motives of gain, but from those of honor and good faith.

Nothing but losses attended the company for the first ten years of its establishment, and it is to the honor of its founders that they courageously struggled against the natural obstacles incident to every new project, relying on the certain returns future commerce would produce. Wheelwright was aware that great industrial achievements often require a

life-time for their accomplishment, because their development is gradual and indefinite. He therefore pursued his course with steadfast resolution, displaying that tenacity of purpose so indispensable to success in undertakings of such magnitude. Fortunately he possessed that patient temperament so opposed to the haste with which idle and feverish speculation seeks to grasp its desired object.

The year 1845 found the line of steamers firmly established according to the original plan of the projector. The system of colonial communication was buried ; but the new system was but just born. To place four steamers on a coast of thirteen hundred miles in length was not to furnish it with fixed and regular means of intercourse. The new creation needed to be formed, to grow, to be trained before it could become a permanent and definite organization. The line having been established, it was necessary to nourish it, to give it means of living ; that is, to provide materials for trade and development. But there is no traffic where there is no production, and there is no production where produce has no outlet for want of regular means of communication. Maritime steam therefore introduced, as its natural result, the railway, which was to bring from the interior the products to be gathered up by the steamers at the different ports.

CHAPTER XIX.

THE STEAMSHIP LINE FIRMLY ESTABLISHED. — WHEELWRIGHT TURNS HIS ATTENTION TO THE IMPROVEMENT OF HARBORS AND THE CONSTRUCTION OF RAILWAYS. — PORT OF CALDERA. — COPIAPÓ RAILWAY. — PECUNIARY GAINS AND DISINTERESTEDNESS OF WHEELWRIGHT.

HARBORS being the connecting links between lines of steamers and railways, Wheelwright perceived that he must use his utmost exertions to improve their condition before turning his attention to the construction of railways.

The port which the nature of the Chilian products indicated as the one where these improvements were most essential, was that of Copiapó. This was the capital city of Atacama, a province of Chili, and the silver and copper ores found there formed the chief export of the country during the years 1845–1850 inclusive. But the mines were at least thirty leagues distant from the coast, and consequently equally far removed from a seaport. The miserable road which connected Copiapó with the mineral district and the bad condition of the harbor itself contributed to enhance the cost of exportation. The twofold

object, therefore, was the removal of both these obstacles at once, by giving to the port of Copiapó a better location, and by connecting that city with its new harbor by a railway. Wheelwright undertook both these enterprises, in virtue of the authority given him as representative of the line of steamers, as also of the stockholders of the Anglo-Chilian Mining Company in Copiapó.

Mr. Moit, a watchmaker of Valparaiso, had already obtained a concession to build a railway between Copiapó and its old port; but Mr. Moit having gone there to inaugurate the work, his proposals were declined by the authorities.

On visiting the northern coast of Chili in one of his steamers, Wheelwright became convinced that Caldera was a far better harbor than that known as the Old Port of Copiapó, situated at the mouth of the river of the same name, and used until then notwithstanding its inconveniences. At the same time he made a personal survey on horseback of the country between Copiapó and Caldera, which he found perfectly adapted to the laying down of a railway. He also ascertained that the port of Caldera would admit of the construction of a wharf where all vessels could receive their cargoes directly from the cars.

In order to introduce a population into Caldera at once, Wheelwright conceived that the most simple method would be to remove to it the inhabitants of the Old Port, using the steamers for that purpose. The suggestion having been adopted by judicious residents of Copiapó to whom it was made, the Copiapó Railway Company was formed, with a capital of \$800,000, Wheelwright having been appointed as its principal director. The company bought from Mr. Moit his concession for the sum of \$30,000, and Wheelwright went immediately to the United States for a corps of engineers. In response to his application, Messrs. Allan and Alexander Campbell, who held a first rank in their profession, sailed for Chili, bringing with them artizans and mechanics of every description, as well as locomotives and the rolling stock of the road. The rails were brought from England. The work having been commenced in 1851, the line was finished and opened to the public during the following year.

This railway, which created the city of Caldera, brought a multitude of improvements to Copiapó, thanks to the indefatigable exertions of its originator. The water of this region having been found injurious to the boilers on account of the lime which it contained, Wheelwright ordered the construction of

powerful machines for distilling all the water used for the locomotives and for the workshops.

The inhabitants of the city were included in this scheme of improvement, and it was at this time that they received another important addition to their comfort and prosperity by the introduction of gas-light into their streets. Furnaces for the manufacture of lime and the smelting of copper were successively built by the projector of the now prosperous railway. The success of this first undertaking led soon after to the extension of the line to the mineral districts of Tres Puntas and of Chañarcillo, situated respectively to the southeast and northeast of Copiapó. A station at Pabellon, eleven leagues towards the interior in the direction of the Andes, received from the company the name of San Guillermo, thus honoring Wheelwright by the adoption of his Christian name. In company with Señor del Carril he visited on one occasion the road which led thence to the mineral district of Chañarcillo, and while breakfasting on a rock together, the former said to his friend "that now was the time for beginning the railway to the Argentine Republic over the Andes." This idea, suggested to him by the direction of the Chilian railways, was that which not long after restored him to the River Plate, where he began his life in South America in the year 1823.

On his return to Caldera he immediately began the work of transferring the custom-house with its officials, as well as many other buildings, and even the inhabitants themselves. Thus was formed the new city of Caldera, whose spacious and animated streets bore the names of Wheelwright, Edwards, Carril, Carvallo, Vallejo, etc., stockholders of the company and prime movers of the change.

The English mining company at Copiapó, representing a capital of £750,000 sterling, committed to Wheelwright the absolute control of their operations, and soon after, at public meetings held in London, he was complimented on the skill and integrity with which he had discharged his duties, having reduced the annual expenses of the company and concentrated their operations on certain points yielding immediate and permanent dividends.

One cannot read a chapter in the life of Wheelwright, without imagining it to be a statement, in which some beneficent and patriotic government recounts to the country the works of improvement it has effected in the discharge of the duties of its position; yet, in reality, it is only the simple history of the labors of a private individual, commenced on his own account and at his own risk, with a view to pecuniary advantage. Thus it is that industry, inspired

and aided by moral principle, blends with the virtues of patriotism and philanthropy.

The desire of gain does not tarnish the glory of a great projector, and so far from excluding the higher motives, it stimulates them by promoting the civilization of the world, which industry accomplishes, although it may be in the pursuit of individual interest. The professions of the soldier and the priest are not considered less honorable on account of the salary attached to them. Useful services of every description would not be worthy of honor if they were not essentially beneficial to mankind. To exclude a man from the profits of his labor would be to punish instead of rewarding him.

Much better is the frank sincerity of the industry which avows the profit it seeks, than the dissimulation of that *pseudo*-patriotism which, under the pretence of serving one's country, in reality makes that the servant of its own interests. A shoemaker, an architect, a merchant, benefits the human race equally with a soldier, an orator, or a writer; but these aspire to the privilege of a twofold recompense, — the salary of their profession and the glory of the position. It is that sort of disinterestedness which despises the contractor who enriches himself

at the same time that he enriches others. The profits of labor do not prevent industry from having its heroes as well as war. The heroes of peace have, moreover, the honest frankness to acknowledge their desire for pecuniary advantage. They do good without claiming to be apostles or missionaries; and their ingenuousness in this respect condemns the hypocrisy of those who write or fight or preach in order to live and get rich, while they demand as their due the laurels awarded to self-sacrifice.

We have presented these reflections because it is important to the destinies of modern society in South America to define the type of men and of service, which merits the preference accorded by the old society, founded on a different basis, only to the arts of war and eloquence.

CHAPTER XX.

WHEELWRIGHT WITHDRAWS HIMSELF FROM THE STEAMSHIP ENTERPRISE. — IS ENGAGED IN VARIOUS PUBLIC WORKS IN VALPARAISO. — HENCEFORWARD GIVES HIS ATTENTION TO THE CONSTRUCTION OF RAILWAYS. — PROJECT OF A RAILWAY FROM VALPARAISO TO SANTIAGO.

IN 1855, twenty years after having projected the steam navigation company, at this date crowned with the most complete success, Wheelwright yielded his rights in the enterprise as the original concessionaire and withdrew from it, after having made ineffectual attempts to extend the line to Chiloe, with a view to communicate with Europe by the Straits of Magellan, the route now adopted by the same company.

He transferred his energies from steam navigation to the construction of railways; but, impressed with the importance of ports, as being the necessary links between the two systems of communication, he returned to his headquarters at Valparaiso and devoted his activity to the improvement and development of that important harbor of the Pacific.

The city was entirely destitute of pure water, and

this want seriously affected trade and industry not less than the health of the population. Wheelwright obtained a grant from the local government to build reservoirs, and to supply water by iron pipes to the houses of those citizens who wished to avail themselves of the privilege. He also attempted to provide the city with gas, although, not to his discredit, another person, more fortunate if not as competent, obtained the concession of the project which he had planned. Only the honor of originating it remained to him. More unfortunately still, the same thing took place with regard to another immense work of improvement with which he designed to endow Valparaiso, — we mean the railway which was to connect that port with the city of Santiago, the capital of Chili and the centre of the agricultural wealth of the extensive valley where it is situated. The conception of this road will always do honor to the genius and foresight of Wheelwright, for he was the first person to whom such an idea occurred.

Availing himself of the corps of engineers who had finished the Copiapó railway, he had the ground between the coast and Santiago scientifically surveyed and the line of road marked out. As soon as he had ascertained its practicability, he solicited from the Chilian government a concession for the

work. The paper in which he made his proposals was a luminous page of political economy, and it opened the eyes of the government, as well as those of the people, to the beneficial change the proposed railway would inaugurate in the condition of Chili. The terms of the concession were less favorable than those agreed upon in many similar undertakings in South America, and yet the mountainous nature of the country over which the road was to pass made the work one of exceptional difficulty, although not beyond the reach of science, as Wheelwright himself said. That the scheme was practicable was proved by the fact of its accomplishment at a later period.

But the administration of that day could not believe that such a magnificent project was even possible, and regrettingly rejected the proposals.

A similar scepticism seems to enter into the composition of statesmen everywhere. Lord Palmerston did not believe in the practicability of a navigable canal across the Isthmus of Suez. M. Thiers, who had a better knowledge of the social than of the natural world, doubted the possibility of a steam railway. The truth is, that the phenomenon of steam applied to locomotion has this singular feature, — that not only was its first suggestion regarded

as paradoxical, but each application of it has encountered the same incredulity.

In the Kensington Museum, in London, there is a copy of the "Quarterly Review," published in the year 1819, which contains the following words regarding the project of the first railway:—

"We are not advocates of fantastic schemes as having any relation to works of utility, and we ridicule as impracticable that idea of constructing a railway on which we shall travel by steam. Is there anything more absurd and amusing than the idea of a carriage dragged by steam and travelling at double the speed of our coaches?"

This was written in 1819, and six years afterwards, in 1825, Stephenson inaugurated his "Locomotion," the name he gave to his immortal invention.

Wheelwright's idea of a railway to Santiago was not lost, and he had at least the satisfaction of seeing it realized years afterwards for the benefit of his beloved city of Valparaiso, and, above all, for that of the Steam Navigation Company, which owed its foundation to him.

CHAPTER XXI.

CONCEPTION AND PLAN OF A TRANS-ANDINE RAILWAY.
— WHEELWRIGHT'S LETTER TO THE PRESIDENT OF
CHILI.

To unite the Pacific States with Europe, that fountain of wealth and civilization, in the same manner that his own country had been connected with it, was always the leading idea of this distinguished American, from the time he doubled Cape Horn in his early manhood.

The Panama route was shorter than that by the Cape, while that of Magellan was more convenient than that of Panama; but another route, shorter still and more convenient, was yet possible across the Andes.

Wheelwright conceived this idea when he terminated the Copiapó railway at the foot of those mountains, and all the labors which enlisted his activity in the Argentine Republic were accessory to, or integral parts of, his great plan of an inter-oceanic road, which was to bring Chili ten days nearer to Europe than it now is either by way of

the Isthmus or the Straits of Magellan. Thus it occurred in the natural sequence of his labors that his career as a South American projector closed on the banks of the La Plata, where it began in 1823.

No one can give the history of this idea so well as its author, and we reproduce the letter he addressed to the President of Chili in 1867, soliciting the co-operation of that government for the execution of the great work, on account of the interest it has at the present day as a grand undertaking yet to be accomplished.

In speaking first of that enterprise, rather than of those which he undertook afterward in the Argentine Republic, we are not interrupting the chronology of his works, since the conception of the Trans-Andine railway dates from 1850.

"To His Excellency Don José Joaquin Perez, President of the Republic of Chili: —

"In the audience that Your Excellency was pleased to grant me, I had the honor to explain some details respecting a railway across the Andes, and I now beg to submit some further remarks upon this gigantic enterprise.

"In calling your attention to the project of a rail-

way from the Pacific to the Atlantic, connecting the port of Caldera in Chili with the valley of the La Plata, I shall briefly review the circumstances that suggested to me the idea and the steps I have taken for this end.

"The importance and practicability of the enterprise were attentively studied by me in 1850, and four years later I resolved on exploring the Pass of San Francisco in the Cordillera, as being the least exposed to obstruction by snow, seeing that for nine years consecutively the traffic had not been interrupted between Copiapó and the Argentine Provinces. Moreover, I learned that in the time of Quiroga, when the natives of the upper provinces fled into Chili, they always came by the San Francisco pass, even in midwinter.

"My first step was to send D. Nicolas Naranjo, an intelligent miner, to survey the outlets of the Cordillera and draw up reports on the neighboring mining districts. He fulfilled this task in an admirable way, and his report was published.

"I then organized a corps of engineers under Mr. Alexander Campbell, intending to accompany them myself; but at that moment Mr. Allan Campbell had arranged with the Argentine government for surveying the route for a railway from Rosario and

Cordova, and at his request I lent him my staff, postponing my own enterprise to another occasion.

"In 1858 I sent an expedition in the charge of Messrs. Rolfe and Flint to go over a second time the ground already surveyed by Naranjo, and they informed me that the pass was practicable for a railway.

"I submitted their reports, accompanied by estimates, to the late Admiral Fitz-Roy, who was at that time head of the admiralty in the Board of Trade in London, and he presented the plan on the 23d of January, 1860, to the Royal Geographical Society, giving it his sanction and support.

"On the 29th of August, 1863, I submitted my project of a railway across the Andes to a meeting of the British Social Science Association, as appears from the annals of the institute.

"The reports demonstrated that the distance from Caldera to Fiambalá is three hundred and twenty-two miles, the most elevated point being 5,764 feet above the level of the sea. X

"Last year I sent Mr. Edwin Hudson to survey and trace out a line from Fiambalá to Punta (near Horqueta), where it is to connect with the Grand Central Argentine, one hundred and sixty-six miles north of Cordoba. His reports show that a railway,

two hundred miles in length, can be built between those two points, Punta being two hundred and fifty-five metres above the sea. The distances would be, —

"From Caldera to Punta 521 miles.

"From Punta to Rosario 413 "

"Total from the Pacific to Paraná, 934 "

"Such is the origin of the project and of the measures taken at my own expense towards its realization. I hope soon to place in the hands of Your Excellency all the surveys, reports, and documents relating to the enterprise, which is of such vital importance to Chili; and I have to ask Your Excellency that you will order a survey in the Cordillera for the purpose of ascertaining if there is a better pass than that of San Francisco. In a work of such magnitude the very best pass should be selected, from motives of economy, as well as of public interest.

"One of its immediate advantages will be a cheap and rapid mode of transporting the cattle from the Argentine Provinces to the markets of Chili and Peru, conveying animals in thirty hours at a maximum cost of \$10.00 per head, thus reducing the price of meat to one half its present figure.

"New branches of commerce will spring up: Bolivia and the northern Argentine Provinces will send their tropical fruits to the southern Provinces; and from the junction of the two railways (near Horqueta) will flow two great channels of trade towards the Atlantic, giving an outlet to the mineral riches of Chili and to the agricultural products of the fertile plains between the Andes and the La Plata. The construction of these roads will verify the prediction of Admiral Fitz-Roy, 'that a railway over the Andes is destined to be the shortest route between Europe and the new Anglo-Saxon empire, which is making such rapid progress on the vast continent of Australia.'

"In one word, this line will produce results which cannot be measured by the human comprehension. Ten years of traffic will not only pay the cost of construction, but will also develop sources of wealth hitherto unknown.

"In a work of this sort it is important to have a large supply of combustible material; and on the Argentine slope are found vast forests, while mineral coal abounds on the Chilian slope, which from samples sent to England is thought to be of an excellent quality and well adapted to the use of locomotives.

"I well know that this project is generally regarded

as visionary, but such has ever been the lot of great enterprises. Steam navigation in the Pacific was regarded as chimerical when first proposed in 1833, but happily it was accomplished seven years later.

"In 1842 I had the honor to submit to President Bulnes and his cabinet of ministers the plan of a railway between Santiago and Valparaiso, but it was decided to be impracticable.

"Aside from the increase of trade, we should reflect how much Chili and the Argentine Republic would gain by strengthening their relations and increasing their intercourse. The barrier which Nature has established between the two countries will be overcome, and the sister republics will be almost like one State in their defence against foreign invasion and in mutual development.

"Any one who will look back for the last fifty years will not be disposed to regard my project as a chimera. Every year hastens its realization, and what some may now regard as a dream will soon become a fact, even more, a necessity.

"My labors will not be lost if they may serve as a basis for carrying the enterprise into effect.

"I am Your Excellency's humble servant,

"WILLIAM WHEELWRIGHT."

CHAPTER XXII.

THE TRANS-ANDINE RAILWAY BRINGS WHEELWRIGHT TO THE LA PLATA AGAIN.

THE man who thus felt, interpreted, and desired to supply the necessities of civilization in those countries could not claim citizenship in any one of them; and yet, if we should judge of his position by his language, we might have confounded him with a Rivadavia in the discharge of his official duties. In fact, the ideas which he advocated, as an economist, were the same which Rivadavia, as a patriot, had desired to realize for the benefit of his country.

Although as yet it was only an idea, the Trans-Andine railway was the motive which induced Wheelwright to transfer his residence to the Argentine Republic. He left one country for the other, only with the view of uniting them in a common work, which would prove a bond stronger and more durable than the best commercial treaty.

When he presented to the Chilian government, the memorial we have quoted, soliciting its co-

operation in behalf of the inter-oceanic railway, he had already obtained that of the Argentine government under the concession of the Grand Central, the seventh article of which directly referred to the Trans-Andine extension of that road.

Chili, on the contrary, tacitly declined his proposals at that time, since by no conceivable rule can he be held responsible for the failure to commence the work then.

This brings us at once to the history of his labors in the Argentine Republic with reference to the great plan of an inter-oceanic railway across Chili, the Andes, and the extensive Argentine territory. The railways from Rosario to Cordova, and from Buenos Ayres to Ensenada, are only sections of that line. The projector who had united the Republics of the Pacific with Europe could not satisfy his ambition in the River Plate by the construction of isolated lines of railway. This is evident from the history of the Grand Central Argentine, which takes the lead of all the others which preceded it, by its extent of two hundred and forty-six miles.

CHAPTER XXIII.

HISTORY OF THE GRAND CENTRAL ARGENTINE. — ITS PLAN. — ITS INTERRUPTION.

THE well-known banker, Mr. Buschenthal, of Montevideo, had made heavy loans of money to the Argentine government of Paraná during the separation of Buenos Ayres from the union of the other provinces, which occurred in the year 1853. In order to promote the commerce and wealth of the country so largely indebted to him, and being well versed in the principles of political economy, he possessed himself of the idea of making Rosario the principal port, not only of the Argentine provinces, but also of Chili and the other countries of the Pacific. With this object in view he crossed the Andes to Valparaiso, where the originator of that idea and his corps of engineers were to be found. Having arrived in Chili in 1854, Mr. Buschenthal made a contract with Mr. Allan Campbell just as Wheelwright was about to send him on his own account to finish the same surveys commenced in the year 1850. Mr. Campbell made his scientific survey

of the ground, and traced the line of road according to the contract made with Mr. Buschentall, which the government subsequently purchased of him for the sum of \$40,000.

Don Mariano Fraguero, minister of finance at that time, being fully acquainted with Wheelwright's ideas, used his influence with President Urquiza to give the concession of the proposed railway to him. The Argentine Congress, however, decided to award it to both Wheelwright and Mr. Buschentall, and by the terms of the grant the work was to be concluded within a period of five years. The division of the country, resulting in the separation of Buenos Ayres from the body of the confederation (which until that time had only been known in Europe under the name of that province), paralyzed its credit in European markets, therefore the time fixed for the conclusion of the work had expired before the concessionaires had been able to form a company and to raise the requisite capital. To this cause of discredit was added that of Mr. Buschentall himself, for reasons foreign to this narrative.

The concession was, nevertheless, renewed in favor of the same gentlemen; but an agreement effected between them in London, through the friendly interposition of the Argentine representative, gave the

whole management of the business into the hands of Wheelwright without prejudicing the interests of Mr. Buschental.

Yet, after the removal of this difficulty, there still remained one far more formidable in the civil war being waged at that time between Buenos Ayres and the Confederation. This contest continued until the decisive battle of Pavón, an event which radically changed the government of the Argentine Republic. When the news reached London, Wheelwright, who was there during that year [1861], was thrown into a state of perplexity regarding his future course. The revolution in the government was so complete that it entirely compromised his position in this arduous undertaking. He decided to accept the advice of his old friend, the Argentine minister in London, and go to the River Plate in order to ascertain definitely what he might expect from the government which had replaced the one which had given him the original concession. The new president had maintained a constant opposition to the enterprise during a period of seven years; for he regarded it as hostile to the interests of Buenos Ayres, from the fact that it was advantageous to the Provinces. This previous opposition, however, did not prevent him from espousing so noble a work afterwards, and he did

himself honor in his endeavors to improve the conditions of the grant. On the 5th of September, 1862, he introduced a resolution into the Argentine Congress, assembled at Buenos Ayres, which should authorize him to enter into a new agreement for the work with a contractor who would do it on his own account. Wheelwright, having been its concessionary by previous Argentine laws, it would have been unjust, as well as impolitic, to deprive him of what had been granted by a law whose authority was unquestionable. Thus the government of Gen. Mitre in making a new contract had the good sense to ratify it with Wheelwright on the 16th of March, 1863, on the same general conditions as before : —

The following are its most important clauses : —

"ARTICLE 1. The National Government authorizes Wheelwright to form a joint stock company, under the name "Argentine Central Railway," for the purpose of constructing and working by steam locomotive a single railroad, which shall start from the city of Rosario, in the Province of Santa Fé, and terminate at the city of Cordova, following the line marked out by the engineer, Mr. Allen Campbell, and contained in his report and plans dated 30th November, 1855, which professional labor will be given to the company gratis.

"ART. 2. The legal residence of the company shall necessarily be in the Argentine Republic, and its capital £1,600,000 sterling, or \$8,000,000 silver, distributed in 80,000 shares, each of the value of £20 sterling or \$100 silver.

"ART. 3. All lands, whether national, provincial, or private property, necessary for the line, stations, wharfs, coal deposits, goods, stores, offices, tanks, and the like railway requisites, shall be given in gift by government to the company, which shall be put in possession of the same whenever required, the government obliging itself to defend and preserve at all times such property against whatever claims may be alleged.

"ART. 4. The materials, instruments, and articles imported from abroad for the construction and sole use of the railway shall be free of all duty for a period of forty years. Likewise the property and dependencies of the line shall be free of tax or impost for the same term.

"ART. 6. All persons employed in the construction or business of the line shall be exempt from any military service.

"ART. 7. Government allows the company the right to prolong the railway towards the Andes, taking whatever route is found most favorable,

granting to all such prolongation the same rights, privileges, and exemptions as cited in this contract respecting the line from Rosario to Cordova, but without the guarantee."

This clause must be kept in mind, on account of the sad results of its violation at a later period, to the injury of the country more than to that of the concessionaire.

"ART. 12. Government grants the company in full property one league of land on each side of the line for its whole length, beginning at a distance of four leagues from the stations of Rosario and Cordova and at one league from the towns of San Jeronimo and Villa Nueva, through which the line passes. These lands are over and above what is stipulated in Article 3, whenever the former are not contained in the latter, and are bestowed on the company on condition of populating them. Moreover, the government engages to procure four leagues square in the province of Santa Fé and four in that of Cordova, out of the public land belonging to each of these provinces, in order to cede them to the company.

"ART. 15. Government guarantees to the company in the working of the line an annual interest of seven per cent on the fixed outlay of £6,400 sterling per

mile, satisfying each year the difference between this interest and the net proceeds of the line, whenever the latter should be less ; but if, afterwards, the proceeds shall exceed the interest, such excess shall be applied to reimburse whatever sums government may have so paid.

"ART. 20. The term of guarantee shall be forty years, to count from the date of commencing to run, after which all obligation on the part of government shall cease."

The news of the signature of this contract was celebrated in Rosario on the 23d of March, 1863, with public demonstrations of an enthusiasm which would do honor to any of the more advanced cities of the United States or of England.

Congress gave its approbation and sanction, and the contract was consequently registered in due form as such on the 26th of May, 1863.

CHAPTER XXIV.

INAUGURATION OF THE WORKS OF THE GRAND CENTRAL ARGENTINE AT ROSARIO. — A REMARKABLE SPEECH PRONOUNCED BY WHEELWRIGHT. — FORMATION OF THE COMPANY IN LONDON.

WHEELWRIGHT, on the faith of the first stipulation of March, had already inaugurated the work at Rosario on the 20th of April of that same year [1863]. The solemnity with which this act was celebrated should not be passed by in silence. The president of the republic proceeded from Buenos Ayres to Rosario, for the purpose of turning the first sod with his own hands. He was accompanied by most of his cabinet. A platform had been built at the point of departure, around which an immense crowd of spectators was assembled. There were flags, banners, triumphal arches, music, regiments of soldiers, — in fact, nothing was wanting to this festive celebration. At the hour appointed "the president," says a journal of that time, "descending from the platform, placed his hand upon the little car and gave it a forward impetus. At its first movement the people burst forth into deafening

shouts of applause; military bands struck up the march composed for the occasion, while the artillery fired a salute, to which the National Guard of Rosario responded. The president struck several blows with the pickaxe, and afterwards threw up a portion of the soil with a spade. He then placed the little car on the line." The whole list of Gen. Mitre's services is of little worth to his career as a public man compared with the glory of that day's work. The course he pursued on that occasion did all the more honor to his policy from the fact that the plan of the railway had formerly received from him only the opposition of party spirit. By assuming the patronage of it, as well as by adopting the national constitution, neither the one nor the other being original with him, he gave a striking proof of political sagacity.

But that did not prevent the Great Central from encountering a rival, and its projector, as well as the work itself, from yielding their place in the sympathies of the old localist to the new scheme of a railway between Buenos Ayres and Chili, by the pass of Planchou, across the pampa inhabited by savage Indians. The projector, Meiggs, whom nobody knew in the River Plate, had the honor of seeing his personal message to the president repeated

in an official dispatch to the national Congress, announcing the speedy arrival of a contractor "at whose voice legions of workmen would spring out of the ground." Without depreciating the merit of Mr. Meiggs, it should not be forgotten that between him and Wheelwright there was this difference: Mr. Meiggs had executed works, planned by the latter, both in Chili and Peru, with money poured out, as we might say, from the public treasuries of those States. Wheelwright, on the contrary, availed himself of private capital, raised upon his own credit, to establish his Pacific steamers and to construct the Copiapó, Great Central, and Ensenada railways. The Trans-Andine Railway by the pass of Planchon served only to abate the enthusiasm for the Trans-Andine development of the Great Central, and, moreover, it would leave the upper provinces in their former isolation, notwithstanding their nominal union with Chili. The words of his inauguration speech prove that President Mitre knew of the intended extension of the Grand Central, and believed it possible. "Every one must rejoice (he said) on the opening of this great road, for it will tend to people solitudes, to give riches where there is poverty, and to institute order where anarchy reigns. It will pass over the wide prairies until at length it

will scale the mountain summits of the Andes, and thus become the great railway of South America."

Nothing marked this festival more worthy of being recorded than the following words, which we extract from the speech made by Wheelwright:—

"A new era has been added to the future history of this country, and new life will be imparted to these hitherto isolated provinces. . . .

"For the present, gentlemen, all our united efforts must be directed exclusively to the realization of the railroad from the point we now occupy to the city of Cordova, passing over a continuous plain of 247 miles. Upon the result of this undertaking will depend its extension through the provinces and its final termination on the shores of the Pacific Ocean. . . .

"After an interval of forty-one years it has been my good fortune to revisit Buenos Ayres. The change I have witnessed has surprised me not a little. Instead of a gloomy and apparently decaying city, containing less than 40,000 inhabitants, I found a population of 160,000; instead of a dozen ships in the outer anchorage, I counted more than one hundred and fifty, and an equal or greater number in the inner anchorage; instead of impracticable streets, filled with 'pantanos,' I found commodious pavements; instead of decaying houses and

ruinous temples, I found a city of palaces, magnificent churches, and public buildings, presenting every sign of affluence and prosperity.

"But what interests us most is the period in which these changes have been chiefly wrought: that period dates from the time when the navigation of these beautiful rivers was declared open to the commerce of the world; this is the fountain from whence has sprung this extraordinary development of wealth and prosperity, and history will do justice to the man who broke the chains of monopoly, opened the seals of these vast streams, and ratified the act by treaties with Great Britain, France, and the United States, 'for all time.'

"My object, gentlemen, in detaining you for a moment longer, is to call your attention to some considerations regarding the event we are now celebrating. The inauguration of the Grand Central Argentine Railway is the commencement of a new epoch, full of promise to the hundreds of thousands scattered over these vast plains; it is the establishment of a glorious movement dedicated to industry, to agricultural and pastoral pursuits. Its object is the regeneration of the provinces, which will be attained by giving to the population spread over this ocean of land the merchandise of the world in

exchange for the products of the soil ; in unbosoming the rich treasures of mineral wealth, so long hopelessly buried ; and, above all, in disseminating light, knowledge, education, and refinement among the masses, and thus teaching them the value of peace and order, respect for the laws and institutions of government. . . .

"Permit me a few observations on the future of this vast enterprise.

"The route to be adopted will be from Cordova to Chañar ; from Chañar to Horqueta, a central point in Catamarca, from thence to Rioja and Copacabana, at the foot of the Andes, a distance of 700 miles ; from whence it will commence the ascent, climbing up the side of the eastern slope of the Cordillera to the pass of San Francisco, at an elevation of 16,023 feet above the sea, where it culminates, and descends the western slope to the valley of Copiapo and Caldera, by a route already defined and declared practicable.

"It is not a matter of surprise, gentlemen, that a project so stupendous should not be looked upon with confidence by many : it is purely a question of time, however ; it will be realized. A more minute exploration and examination of the mountain passes may discover an easier route ; but its transcendent impor-

tance will overcome all barriers ; it will bring together and unite the great South American family of nations by new sympathies ; it will open up new commercial developments ; it will discover new merchandise, new interchanges of products ; it will make South America the stepping-stone between Europe and Australia, that future vast empire of the West ; it will strengthen the South American States, and enable them to concentrate against invasion.

"Europe is also deeply interested in this great work. England, always anxious to draw her colonies nearer to her, will lend her capital to aid the accomplishment of an enterprise which has been pronounced by that distinguished hydrographic admiral, Robert Fitz Roy (a name familiar as a household word in all South America), as not only practicable, but that when realized it will become the great highway between Great Britain, New Zealand, and New Holland."

Thus Wheelwright sought to carry the locomotive of civilization not only to Cordova but to the country of Chacho and Quiroga, and at length over the heights of those mountains which San Martin crossed with his artillery. His object was to bring the minerals of Famatina to the gates of the La Plata ; to give to the western Argentine provinces

the ports and markets of the Pacific ; to make of the Argentine soil the highway of intercourse between Europe and Asia ; and to unite Chili with the Argentine Republic by ties more durable than all the bonds of diplomacy.

Wheelwright returned to London in July, 1863. The condition of the River Plate, notwithstanding the consolidation of its government, did not inspire more confidence in that market of great enterprises than before the re-establishment of the union and of the peace between Buenos Ayres and the provinces. A man less favorably known would perhaps have been ruined in such a situation ; but the condition of affairs in the River Plate having been really improved, it was not difficult for him to convince that greatest of European railway contractors, Mr. Thomas Brassey, that the crisis was passed. By the means of his powerful co-operation and that of his associates a company was organized. On the 10th of March, 1864, it was registered in London with the capital required by the terms of the contract, — £1,600,000 sterling.

The prospectus having been issued in the month of May, the 50,000 shares, at a value of £20 each, were taken, the remaining £600,000 having been left to be called in when the money should be necessary.

The first ten miles of the railway were finished before the 26th of May, 1864; but on account of the war with Paraguay the line was not completed within the term of years fixed upon by the contractors, and consequently the inauguration of its public service did not take place until the 17th of May, 1870.

CHAPTER XXV.

INAUGURATION OF THE GRAND CENTRAL AT CORDOVA.—
DISCOURAGEMENTS.—A LOAN OF THIRTY MILLIONS OF
DOLLARS REQUIRED BY THE GOVERNMENT, A PART OF
WHICH WAS TACITLY PROMISED FOR THE PROSECU-
TION OF THE RAILWAY.—WHEELWRIGHT'S MEMORABLE
SPEECH AT CORDOVA.—HIS THREATENED EXCLUSION
FROM THE MANAGEMENT.

THE inauguration of the Grand Central at Cordova, the terminus of the first section of the railway, was marked by festivities even more enthusiastic than those which took place at Rosario seven years before. It was no longer an idea but an accomplished fact that was to be celebrated. The national government recognized the importance of the occasion in a decree issued on the 16th of May, 1870, which was couched in these terms:—

"In consideration that the inauguration of the Grand Central Argentine Railway is to take place on the 17th inst., and that this is the greatest event of this epoch for the Republic and a triumph of civilization for the Argentine people through their efforts under Divine Providence, the President of the Republic decrees, —

"*First.* That the national flag shall be displayed to-morrow on all public buildings.

"*Second.* That as soon as the telegraph shall announce that the act of inauguration has taken place, a salute of twenty-one guns shall be fired from the fort.

"*Third.* That the Bishop of Cordova shall transmit his benediction by telegraph to all the Republic on this auspicious occasion.

"*Fourth.* That the Governors of Buenos Ayres and Santa Fé shall be invited to take part in this demonstration."

It would seem natural that the president who signed this decree should proceed to Cordova himself, in order that he might have the honor of presiding at the consummation of the great work which had been inaugurated in the presence of his predecessor, Gen. Mitre; but such was not the case. The fifth article of the decree provided that the Minister of the Interior should represent the government at the inauguration, and that he should give an account of the event after it had transpired.

The administration had changed more than once since the idea of this great work was first advanced. There had been three separate concessions, each contract having limited its execution to a period

of five years. The work had consequently occupied seventeen years in its accomplishment, the Paraguayan war having proved a most formidable obstacle to its prosecution. Four different administrations had taken part in it, — those of Urquiza, of Derqui, of Mitre; and it fell to the lot of that of Sarmiento to inaugurate a work, independent to a certain degree of his direct co-operation. This, however, was not the principal cause of the lukewarmness manifested by the government, notwithstanding the pomp of its official rhetoric, which was somewhat constrained in an administration pledged to a progressive policy. The absence of President Sarmiento showed that his enthusiasm was not up to the mark of that of the nation in the solemnization of that great event; but his attitude was more clearly defined in the speech of his delegate, Don Velez Sarsfield, Minister of the Interior, who, in all his diffusiveness, took care not to mention even once the name of the man who had spent seventeen years of his life in endowing the Argentine Republic with that gigantic work of civilization and progress. Several presidents had succeeded each other during that long period, but the projector of the Grand Central had always been the same indefatigable man who first planned the enterprise. The *éclat* of the

celebration testified to the merit of the work, and the work itself testified to that of its author. Nevertheless, in a country where every principle is personified, in which liberty is embodied under the name of San Martin or of Belgrano, there was a special significance in the fact that the minister delegated by the president as his representative dealt with Wheelwright as an abstraction, and passed over in absolute silence the name of him who from first to last symbolized that great event. Did this omission proceed from ingratitude or personal animosity? Such a motive would not be worth noticing; but a historical record cannot overlook subsequent facts of great consequence which this official silence foreshadowed.

The probable motive of the scandalous silence of the government regarding the projector of the Grand Central was one of jealousy or competition. The government of President Sarmiento wished to supersede Wheelwright as contractor for that portion of the road yet to be constructed. Taking on itself the undertaking would afford to the Argentine Government a pretext for raising thirty millions of dollars in London for investment in this and other objects of the same class. Without a motive so grand, so worthy, so popular as was that of the

Trans-Andine railway, in the country itself, as well as in London, it would be impossible to raise a loan of such magnitude.

But the concession had been granted to Wheelwright, and, firm in the right given him by Argentine legislation, and as a citizen of the United States, he would not suffer himself to be supplanted in the control of this great undertaking. In order, therefore, to remove any suspicions of their real object, he was made to believe that the money proceeding from the loan would be placed at his disposal for the extension of the Grand Central in the direction of Tucuman and the Andes. The loan once secured, the first obstacle to its practical investment would be Wheelwright himself, or the company which he represented, for this obvious reason, — that Wheelwright would wish to invest the money in the public works for which it had been raised, that is, in the development of the Grand Central; while the intention of the Government was to invest it in iron-clad ships, and in providing for their maintenance.

There are statesmen who go to the United States in order to learn how to imitate Turkey. The history of the recent loans of the Ottoman government is well known. Having been negotiated in London for the construction of railways and the promotion of

other public improvements, they were employed in purchasing iron-clads and in gratifying the luxurious tastes of the court.

Wheelwright wished to rivet the union of the Argentine Republic with Chili by the iron of the Trans-Andine roads. What the Argentine Government desired was a rumor of war with Chili, to justify the purchase of iron-clads and their armaments; and this, with the very money obtained for the construction of the roads themselves. Wheelwright offered to raise the loan without any interest or commission whatever, but on the sole condition of receiving a pledge that the avails should be invested in the works ostensibly set forth as the object of his negotiation.

That simple insinuation sufficed to alienate altogether the confidence of the Government which desired to supplant him in his enterprises; yet he was justified in thinking this stipulation necessary from the very fact that a loan of such magnitude was proposed or desired. He would not have raised at one time \$30,000,000 for works which would only require that sum in a long course of years. In wishing to receive at once a sum so disproportionate to the wants and resources of the country, the Government authorized the belief that it was not destined

to public works not even begun at that time. The application of that money to the purchase of iron-clads and armaments in London was well known. These facts deserve the attention of history, because they explain the evils which have resulted from them to the prejudice, not of Wheelwright personally, but of the great improvements of which he was the instrument and representative.

It is true that without him the Grand Central has been extended in the direction of Tucuman with the proceeds of the loan; but in exchanging the broad gauge laid down for this road for a narrow one, a less sum has been invested in that work than the amount appropriated for it, and the unity of the gauge has likewise been broken. The exclusion of Wheelwright from the work of the Grand Central in its further development has destroyed the most essential part of his original plan, which was to connect the Pacific with the Atlantic across Chili, the Andes, and the Argentine territory in a uniform line. That this work never had a less extended aim in his view and in that of his associates is shown in a most decided manner in the speeches pronounced at the two festivals of the inauguration of the works of the Grand Central. Wheelwright repeated at Cordova what he had said seven years before at Rosario, that the inau-

guration of the Grand Central was that of the first section of the Trans-Andine railway.

On the same occasion the venerable Mr. Thomas Armstrong, Wheelwright's friend and a powerful co-operator in his works in the River Plate, uttered the following words, which imply the proposed extent of the line : —

"This is the happiest day of my life, since it gives me the pleasure of contemplating the completion of an enterprise to which I have devoted so much time and money as resident director and which is destined to be the greatest enterprise of South America. In spite of the cholera and the Paraguayan war, notwithstanding the losses of vessels and the revolutions which have retarded our progress, we have so far carried it on to a successful result. Throughout all future time this railway will be an honorable memorial of the government of Gen. Urquiza, under whose administration it had its origin, of that of Gen. Mitre, who turned the first sod in 1863, and of that of Sarmiento, under which it is this day finished."

The Hon. Mr. Kirk, Minister of the United States, to whom Wheelwright had confided his plans, closed his speech in the following words : —

"It will not be long before the locomotive of the Grand Central will scale the Andes, and this rail-

way, like the Great Pacific Road in North America, will be a great thoroughfare between the two oceans."

Nothing is more conclusive on this point than Wheelwright's speech to the people of Cordova, which we reproduce here:—

"LADIES AND GENTLEMEN:

"I have the honor to offer you my hearty congratulations on the arrival of the locomotive in this city after traversing the immense prairies which separate it from the coast. It is an era in the progress of this country worthy of the jubilee we are now celebrating.

"One cannot comprehend at a glance the great benefits consequent upon the opening of this railway, which will bring together districts of country hitherto widely separated, a work only to be accomplished by the motive power of steam.

"After having spent a large portion of my life in establishing steam communication on the Pacific and in efforts to open easy communication with the Atlantic through the Isthmus of Panama, subsequently introducing railways into Peru and Chili, His Excellency, Gen. Urquiza, invited me in the year 1854, through Mr. Fragueiro, his distinguished minister, to take charge of the railway from Rosario to Cordova. I accepted his proposal, and from that

time until now I have bent all my energies to the accomplishment of this work. The civil war then raging was at first an insuperable obstacle to success, and I labored in vain to inspire confidence in the minds of capitalists and to persuade them to invest their funds in a country whose political order was not established upon a firm basis.

"In 1862, when the Argentine Republic had formed a more perfect union, and the darkness of the political horizon had been somewhat dispelled, I embarked for the River Plate for the purpose of entering into negotiation with the general government, and it was not long before I had the satisfaction of taking the contract for this work, tendered to me by Mr. Rawson, the distinguished Minister of the Interior.

"It was on the 20th of April, that Gen. Mitre, the President of the Republic, broke ground with the spade, a ceremony indicating that the work was already begun.

"On my return to Europe, in July, 1863, in order to form a company and raise the necessary funds, I found the spirit of railway speculation at a low ebb, but I had the good fortune to enlist the sympathies of Mr. Thomas Brassey and his partners, the first railway contractors in the world, and it is to their

influence and capital that we owe in a great measure the success of our undertaking.

"It is now sixteen years since my first arrival in this city (Cordova), and I shall never forget the hearty welcome extended to me, and the confidence manifested on your part that all your wishes would be realized. It is therefore with unfeigned delight that I present to you the great work now brought to a successful termination, thanks to the Supreme Being, who has watched over me and permitted me to witness its completion in spite of the obstacles which at times put a stop to its further progress !

"Gentlemen, my age and infirmities will not perhaps allow me to take an active part in the labor required to extend this railway both to the north and to the Pacific Ocean, as I had originally intended, but I hope that my services in Europe in securing the funds requisite for this object will be of greater value to you than my personal superintendence of the work itself. You may rely upon my constant and faithful efforts, as well as upon the auxiliary labors of my associates, with their prestige and capital, for the successful accomplishment of the work intrusted to us, believing as we do that we enjoy the confidence both of the government and people.

"I dare not speak of the electric telegraph, because

the more I reflect upon this mighty and wonderful agent, the more inclined I am to be wholly silent. It seems as if the Great God had loaned us this mysterious element in order to the fulfilment of the words of Holy Writ which foretell a period of the reunion of all nations in one brotherhood, when there shall be 'peace on earth and good will to men.'

"The great and ill-fated Lincoln, profoundly moved by the contemplation of the insignificance of man, in view of the mighty works of the Creator, could do no more than transmit these memorable words to Her Majesty Queen Victoria, at the inauguration of the trans-Atlantic cable: 'These are the mighty works of God.'

"Probably not a year will elapse before you will find yourselves in communication with your friends who may be travelling in Europe, Asia, or Africa, transmitting almost instantaneously your salutations and informing them of your welfare and that of your families; while on the other hand, the merchant may give orders in London or Paris for the dispatch of necessary articles, advising his agents of corresponding remittances. The people of Cordova, isolated hitherto, are now, by means of the railway and telegraph, brought into communication with all the nations of the world."

By removing Wheelwright from the management of this great work, the construction of the Trans-Andine railway was postponed for half a century. That great line was cut short and reduced to a local road, such as the Grand Central now is, while according to the original design it was to be interoceanic and international. The work was taken from his fostering care; and the concession, which by special legislation had been given to him years before, was now offered at auction. To suppose that another man, without his prestige on both continents, and lacking his preparation of half a century in labors of similar magnitude, would be able to execute that work with capital raised in England, appears more than doubtful, unless he should furnish guarantees that the road should be carried on agreeably to the plan traced out by Wheelwright.

The extension of the Grand Central in the direction of the Andes and of Chili, of Tucuman and Bolivia, was in the hands of contractors and capitalists, the best known and most distinguished in the world (such as Mr. Thomas Brassey, who had constructed the principal railways of England and France), and the concessions for the work had been given to them by a law which we have quoted previously;—a double reason for leaving it entirely to their able manage-

ment. There was nothing to justify the shadow of a doubt concerning their ability to carry out such an undertaking with their own private capital, and they had already finished the first section of the line, which was a bold innovation for its time. They had also employed the ablest engineers to make explorations and accurate surveys for the continuation of the railway in the direction of Tucuman and the Andes. The account of the survey for the Tucuman road is comprised in a book of one hundred pages, to which is appended a map drawn up by the state engineer, Don Pompeyo Moneta. This book is a most valuable contribution to scientific research. It was not an ordinary survey of the ground where rails were to be laid, but a study of the whole territory, comprising a great variety of information regarding the trade, the population, the productiveness of the soil, its rivers, the extent of timber lands, its mineral products, accompanied by plans and tables of statistics. The Government recognized the importance and intrinsic value of this survey, and ordered its publication in the interest of the country, in 1867. The contractors did not await the conclusion of the Grand Central at Cordova in order to decide upon the means of its extension. They began their investigations as early as 1866, five years before the

completion of the Cordova section. I saw in London, in Wheelwright's hands, a collection of different species of wood from Tucuman, of which I myself, although a native of that province, had no idea. He had written to Dr. Avelino Aramayo, a distinguished gentleman in Bolivia, to furnish information upon the nature and characteristics of the soil over which the northern branch of the Grand Central, to Potosi, was to be built.

Affairs had reached this point, when the Government determined to wrest the concession from the hands of those to whom it belonged by right, although this decision was kept secret until the loan should have been realized. In the history of a projector of public works, the following reflections, perhaps, will not seem irrelevant, as being suggested by the incident just cited, and which is unhappily less rare than might be supposed.

In new countries, where adroitness is more common than good judgment, we frequently give the name of loans for public works to what in reality are public works for loans. As soon, therefore, as the loan is secured, the object is gained, and the public works become a matter of secondary importance. If they are impracticable, they are so much the better adapted to the end in view, since

it is the loan itself which is the thing sought, and not the work. In fact, the money borrowed is often used to frustrate the accomplishment of the very undertaking for which it was ostensibly raised, in order to secure its real application. Thus it happens that large sums, instead of being invested in works of public utility, are appropriated in a manner entirely prejudicial to the interests of the country at large.

If the creditors would not wish to be the accomplices of this evil to their own injury as well as to that of the people they wish to serve, they have it in their own power to provide for the wants of the people instead of ministering to their follies. This can be accomplished by lending them, not money, but public works controlled by companies or contractors in concurrence with those who loan the money. In this way the Government thus borrowing will be obliged to devote the funds to the specific object for which the money was loaned, and cannot waste it in extraneous extravagances. But the duty of the creditors does not cease here: they must be the judges of the suitableness of the work for the accomplishment of which they lend their money. To provide means of transportation where there are neither trade nor elements of trade is labor lost.

For instance, railways are built for a desired traffic and not for that which actually exists. Then there are electoral railways, or those which are made or fail to be made merely to secure a political election, after which they are abandoned as worthless scaffolding. I well know the objection which will be made to these suggestions by those who mimic great States in the splendor of their public undertakings, without imitating them so faithfully in their duty as good paymasters.

Do patriotic governments desire to endow their subjects with works of public utility, without incurring themselves a shadow of reproach? This they can do by not exchanging their *rôle* as governors for that of contractors. Let them leave the liberty and the initiative of these works of improvement to private capital and individual energy.

Notwithstanding the closing words of Wheelwright's speech at Cordova, — too unassuming to be taken literally, — he was by no means incapacitated for concluding the great works still pending. His credit alone was a sufficient guarantee for their termination, and his energies were far from being exhausted. Although old in years he was not so in his mental faculties; and as evidence of it, three years after these words were uttered, he built the

Ensenada railway, one of his most arduous undertakings. If considered more insignificant on account of the shortness of the line, at least, it was far from being so in its social and political bearing, since it is well known that that work implies a revolution, or rather a radical reform, in the economic and political system of the Argentine organism. The mere suggestion of changing the port of Buenos Ayres to Ensenada contributed in former years to Rivadavia's unpopularity with those who supported the old system of commerce supposed to be threatened by that change. The removal of the port of Buenos Ayres to Ensenada involves two of the greatest interests of the Argentine Republic, — the custom-house revenues, from which the national treasury chiefly derives its supplies, and a capital for the country. Wheelwright laid his hand upon those two vital questions and put them in the way of their spontaneous solution.

CHAPTER XXVI.

RAILWAY AND PORT OF ENSENADA. — ORIGIN AND IMPORTANCE OF THAT ENTERPRISE. — WHEELWRIGHT'S LETTER DEMONSTRATING THE ADVANTAGES OF THE NEW PORT.

WITH what motive and from what period did Wheelwright occupy himself with the Ensenada railway and port, an enterprise so secondary in itself when compared with that of the Trans-Andine railway? With the motive of this great work itself, and at the very time he contracted for its construction in 1863. Faithful to his plan of connecting the two oceans, he comprehended that the road which proceeded from the maritime port of Caldera on the Pacific ought to terminate in a maritime port on the Atlantic, instead of any of the river-ports made use of in the Argentine Republic. This Atlantic terminus was no other than Ensenada, situated twelve leagues south of the capital and hitherto completely ignored. To shorten the intervening distance by a railway, and to make of Ensenada the port of Buenos Ayres, was Wheelwright's idea in undertaking this enterprise. To this end, in 1863, when he obtained

the concession of the Grand Central, after the establishment of the union between Buenos Ayres and the Argentine provinces, he purchased of M. Lelièvre the privilege granted him by the provincial government for the construction of the Ensenada line, and commenced that work simultaneously with that of the Grand Central.

The railway between Buenos Ayres and Rosario was already foreseen and determined upon by the logic of events. Wheelwright would have been its concessionaire (instead of Don Mariano Billinghurst, to whom the concession was granted at a later period), had his life been prolonged. It was the natural connection of that line, destined to realize the golden dream of Rivadavia, the unity necessary to the Argentine Republic in order to make it stronger than its neighbors.

In the month of March, 1870, a little previous to the inauguration of the Grand Central at Cordova, Wheelwright invited the members of both the provincial and national governments to visit the port of Ensenada, that he might enlist their co-operation by the ocular inspection of its advantages, marvellous as they were unknown. To this end he planned an excursion party on board a steamer chartered for that purpose, to which President Sarmiento and his

Minister, Velez Sarsfield, Governor Castro, and many other distinguished and influential persons were invited. The visit took place on the 25th of March, 1870, and its best historian is Wheelwright himself, who addressed to the *Standard* the interesting letter which we shall here introduce in part:—

“BUNEÓS AYRES, 26th March, 1870.

“The object of yesterday’s excursion to Ensenada was to show their Excellencies, the President and the Governor of the Province, together with their respective ministers and friends, what a beautiful port the Argentine Republic possessed. Neither the President or Governor had ever seen it before. I know not what effect the view of that splendid bay produced upon them, but to me it was most gratifying to find that within twelve leagues of this city there exists a natural port, capable of accommodating a thousand ships, and susceptible of improvement with respect to the bar, where a channel may be opened for ordinary vessels which visit the Rio de la Plata, besides having an anchorage unrivalled in Europe as to security from dangerous winds for the largest merchant ships or ships of war.

“The captain of the ‘*Décidée*,’ who has recently surveyed the Ensenada, by order of his Government,

made the following observation to the national authorities: 'It is scarcely credible that while Buenos Ayres has no recommendations as a port, it should have continued to suffer for so many years enormous losses from the insecurity and danger of its anchorage, causing an immense risk and detention in the transportation of freight and passengers. It is certainly very strange that she should not have availed herself of this beautiful port of Ensenada.'

"Such is the testimony of an eminent French admiral, the result of his own observations and his personal surveys.

"What more can the Government of this Republic desire than the additional testimony offered to Rivadavia half a century ago, by Mr. Bevans, a distinguished engineer (and by many others no less competent), with regard to Ensenada and its capacity for accommodating a great commercial marine? A port most convenient and secure, as smooth and sheltered as that of Panama, it is capable to an unlimited extent of wharves, warehouses, and dikes, and it needs only a little aid from Government to furnish it with all the facilities of any port of Europe. . . .

"Will the national and provincial governments remain in a state of apathy with regard to the

treasure they possess in the port and anchorage of Ensenada? Will they continue to look with indifference upon the miserable condition of things which taxes the country heavily by the loss of ships, of time, of merchandise, amounting to millions of dollars annually? . . .

"Shall not the enlightened ideas of Rivadavia be revived, who, without the aid of railways (unknown in his time), most strenuously advocated the Ensenada port, even with the slow process of canal communication? . . .

"That Ensenada is destined to become the port of Buenos Ayres is no more doubtful than that the sun will rise to-morrow, inasmuch as it is merely a question of time, and that time is not far distant.

"It should be remembered that we have no occasion for custom-house warehouses, since the plan is to discharge merchandise directly from the vessel to a covered mole of sufficient breadth, which will be all the protection necessary in the transshipment of goods.

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"Yours, etc.,

"W. WHEELWRIGHT."

This was only a brief statement of facts. The port of Ensenada was a treasure which the country

possessed without knowing it and without profiting by it. But the discovery which Wheelwright made of this treasure was only used by the Argentine politicians as a frightful spectre to produce that great delusion, the so-called port of Bateman. This consisted of a plan to dig a river within a river opposite the city of Buenos Ayres. Bateman's port had for such officials not only the advantage of being impracticable, but that of serving as an excellent reason for raising a loan in London of \$12,000,000 to be vested in that work, and subsequently to serve as a better reason still for not investing the money in such a Quixotic enterprise. The loan of thirty millions, of which those twelve formed a part, having been negotiated in behalf of works which Wheelwright had in hand, it is impossible to ignore it in this history of his life and operations. It is interesting to see how a loan negotiated for public works may be used for their hinderance rather than for their promotion. An instance of this was the port of Bateman above referred to. The money raised for that purpose, and which was not applied to it, was used for the purchase of a navy, and at the same time for the closing of the only seaport in the country capable of floating this navy. We shall see under what circumstances Wheelwright returned to London at the time

when this loan, so connected with his unfinished works in the River Plate, was being negotiated, and the means by which the Argentine government maintained its deception under the pretence of a progressive policy.

CHAPTER XXVII.

WHEELWRIGHT IN LONDON DURING THE NEGOTIATION OF THE LOAN. — DEATH OF MR. BRASSEY.

AFTER the inauguration at Cordova, in 1870, Wheelwright returned to Europe in the same year, for the benefit of his health, visiting the baths of Kissingen. On his first arrival in London he sought out new facilities for the prosecution of his pending labors in South America. The chief difficulty which he had to encounter was the duplicity of certain Argentine officials, who wished to raise a loan for other purposes than those for which it was nominally intended, as we have already shown.

The improvement of the port of Buenos Ayres, in conformity with Bateman's plan, was on the part of the Government a hindrance to Wheelwright in procuring capital for the improvement of Ensenada. Innumerable artifices were also resorted to in order to prevent Wheelwright from finding co-operators and capital in London; for they could not deprive him of his rights as they had done in the affairs of the Grand Central, the concession for the Ensenada

road having been made by the provincial government of Buenos Ayres. To conceal these facts would be to leave incomplete the history of the life of Wheelwright, as well as that of the material interests of the Argentine Republic. Where they have been shipwrecked once, they may be imperilled again, and it is our duty to point out the shoals. The name and personality of Wheelwright symbolize modern industry in its conflict with the effete colonial system represented by old Castilians disguised in modern fashionable attire.

Soon after Wheelwright's arrival in London the death of his eminent partner, Mr. Brassey, took place. He was the greatest contractor in the world; for there is scarcely a portion of it where he has not constructed more than one important line of railway. If his fortune may be taken as a measure of his capacity, it is enough to say that he left to his heirs an inheritance of one hundred millions of dollars, besides the value of his credit, which represented double that amount. As an Argentine citizen I owe this testimony of respect to the man who aided us in building the Grand Central.

From interested motives, as well as from moral obligation, his children would have been willing to continue the co-operation of their father in Wheel-

wright's South American enterprises, but in the presence of a government which aspired to be itself a contractor, we can easily understand how the heirs of Mr. Brassey's obligations should wish to avoid such competition. They had been accustomed to see their father's name and co-operation solicited by great governments instead of ignored by smaller States.

Wheelwright was well aware of all the intrigues practised to deprive him of the aid of the Brasseys, but in the rejection of their assistance it was not he but the country that was the greatest loser. It needed their private capital to carry forward the public works, which could not be successfully carried forward in any other way.

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CHAPTER XXVIII.

BY WHOM WERE THE INTERESTS OF THE ARGENTINE REPUBLIC MOST MATERIALLY ADVANCED, WHEELWRIGHT OR PRESIDENT SARMIENTO?—THE WORKS OF WHEELWRIGHT WERE IN CONFORMITY WITH THE IDEAS OF RIVADAVIA.

To thwart Wheelwright in his Argentine labors was to injure the country in her most vital interests, as they have been understood by her best citizens; it was to frustrate the plans which Rivadavia had endeavored to carry into effect. These plans constituted his greatest claims to glory. The works which Wheelwright accomplished, or attempted to accomplish, in the River Plate, were in conformity with the ideas of that great man, who desired the consolidation of the whole country into one State, thus rendering it as powerful as its neighbors, Chili and Brazil. Notwithstanding that their forms of government are so diverse, these two States are alike in their stability, which is the result of unity; and it is to our purpose to note that they owe this centralization to their facilities of communication. Both countries are situated on that great highway, the sea.

Chile indeed is only a belt of sea-coast, and Brazil began by being a mere outline, a maritime coast, peopled, as Malte-Brun observes, as were the United States themselves at the commencement. The interior was not occupied until afterwards and by slow degrees. The Argentine Republic is even more capable of unity than its neighbors are, on account of the level character of its soil, while that of Brazil, and of Chile especially, is rugged and mountainous. In search of the homogeneous character which ways of communication establish, Rivadavia desired in behalf of his country the improvements which Wheelwright began to realize by the lofty purposes of his honest industry. These were —

First. The port of Ensenada, or rather the seaport Rivadavia and Wheelwright wished to give to Buenos Ayres as its proper and natural harbor.

Second. The canal to the Andes, which Rivadavia desired when there were no railways, or its equivalent, the Grand Central, which Wheelwright began between the coast and the mountains.

Third. The colonies that Rivadavia aimed to establish, and which Wheelwright founded along the line of the Grand Central. There is no colonization possible where the colonist cannot export his produce over good and cheap roads.

Fourth. The assurance of the stability of the nation's capital afforded by Wheelwright's railway, which makes of Ensenada the maritime port of Buenos Ayres for the exportation of our raw productions, — hides, wool, horns, meats, tallow, etc., — thus securing to Buenos Ayres the cleanliness and comfort so essential to the capital of a great country.

It is not difficult to see how the Trans-Andine railway, carried out according to Wheelwright's plans, would fulfil all these requirements. The Grand Central between Rosario and Cordova and the Ensenada road are only fragments or constituent parts of that great interoceanic line of which Ensenada and Caldera were to be the eastern and western termini.

It is useless to advocate immigration and colonization for any country not furnished with a good seaport capable of accommodating the commerce which is their natural outgrowth. It is equally absurd to aspire to the possession of a mercantile and naval marine, and yet to persist in sealing the only harbor which the country possesses.

The Ensenada port enterprise, the Trans-Andine railway, and the colonies planted along its line were all intimately connected with one another.

It seems almost incredible that the Government should not have lent its co-operation in undertakings

so manifestly allied with the interests of the country ; but it is still more difficult to believe that an administration upholding an enlightened policy should do all in its power to frustrate these works of progress.

Such, however, was the case, as we shall endeavor to show, not with a fruitless spirit of criticism, but with the useful intent of indicating the point where the chain was broken, so that at some future time the necessary link may be supplied.

Wheelwright arrived in London at the close of 1870, during the invasion of France by the Germans. That war which darkened the horizon of European speculations, cleared that of American investments, so that the eyes of intimidated capitalists were turned in a new direction. This condition of affairs greatly facilitated the negotiation of the Argentine loan. In order that it might gain moral support, it was rumored in London that Wheelwright would be the contractor for the Tucuman railway, and such representations were made to him that he was induced to credit the report himself. He presumed that at least a part of the money would be placed in his hands for the accomplishment of his projects, as a partial compensation for the concession of which he had been so unjustly deprived.

When a friend said to him that in the interest of

his labors, and in that of the Argentine country, he wished the loan might fail, Wheelwright's sense of honor was shocked. Another friend and co-worker of his, not less upright but better acquainted with the character of the people than he, had remarked to him long before that he would never do great things as a contractor in South America, because he did not understand intrigue.

Nevertheless, he was enabled to carry forward, without stooping to manoeuvres, the greatest industrial works of which that country can boast.

The Government which aspired to supplant him employed its official agents for the double purpose of deceiving him and frustrating his projects. It was well aware that no loan would have been possible had he opened his mouth to thwart it. He did not oppose the negotiation; neither did he aid it, unless by his absolute neutrality. But the duplicity of the agents of the Government was evident from the fact that, at the very time they were representing to Wheelwright that the loan was for his works, they were persuading other parties that his were not public works, and that therefore the money would not be applied to them.

Meanwhile, nothing was talked about in Buenos Ayres but the two great chimeras, Bateman's port

instead of that of Ensenada, and the Trans-Andine railway by the pass of Planchon, instead of Wheelwright's railway by the pass of San Francisco. They were phantoms placed in the field against realities by the artifice of politicians. Unhappily the result of their manœuvres was, first, to leave the country in debt to the amount of thirty millions of dollars, the interest of which has involved the disbursement of a large portion of its ordinary revenue; second, to deprive the national treasury of the greater proportion of the loan itself; third, to leave the nation without the Trans-Andine railway, so necessary to the development of its resources; fourth, to lose the co-operation of Wheelwright and his powerful friends, in the prosecution of works impossible to smaller contractors; in fine, to bring about the dreadful crisis which God grant may not culminate in chronic bankruptcy.

CHAPTER XXIX.

ACCIDENTAL CIRCUMSTANCES WHICH FACILITATED THE COMPLETION OF THE ENSENADA RAILWAY.

AFTER having made a voyage to the United States to visit for the last time his native country and the home of his parents, Wheelwright returned to South America in 1871. He soon discovered that he was shut out from the Tucuman railway (the extension of the Grand Central), for which he had caused to be made at his own expense an elaborate survey.

But all the machinations of the Government could not frustrate the Ensenada enterprise. Notwithstanding the shortness of the line, this railway possesses the significance of a political, social, and commercial revolution for the Argentine Republic. On account of its political bearing, as well as from financial difficulties, its progress was constantly retarded during a period of eight years, when it was finally completed. This road was the *Via Sacra* of Wheelwright. Every step was one of suffering, and it was only finished with his life. With it his career of labor in South America was closed just

where he commenced it fifty years before, when he was shipwrecked at Quilmes. Although commenced simultaneously with the Grand Central, it was but little advanced in 1871, notwithstanding its insignificant extent of thirty miles. Its unexpected termination was due to accidental circumstances, without the intervention of which Wheelwright would probably never have had the satisfaction of seeing this cherished project accomplished. The French government had ordered one of its naval officers, stationed at Buenos Ayres, to make a survey of the port of Ensenada. The report of this survey (made in 1870) showed the blindness and folly of a policy which would persist in closing so convenient a harbor and one so very much needed by the navies and commerce of the world.

In the following year that fearful epidemic, whose victims numbered six hundred a day, broke out in Buenos Ayres, demonstrating most strongly the necessity of removing to a safe yet easy distance the *mataderos* and *saladeros*, with which the city was surrounded.

Free from any other occupation, Wheelwright now devoted his energies to the conclusion of the Ensenada railway and pier. Having been put into the hands of the contractors, Simpson and Ariagno, the

works proceeded with a rapidity as astonishing as their previous delay.

The inauguration of the line as far as Quilmes took place on the 18th of April, 1872. A large concourse of people from Buenos Ayres united with the inhabitants of Quilmes in celebrating the event. Among the more prominent people who were present were His Reverence Bishop Aneiros, the cabinet ministers of the President (who distinguished himself by his absence), Señor Castro, governor of Buenos Ayres, and other notabilities of the country.

After the ceremony of inauguration, some speeches were made worthy of record. The governor of Buenos Ayres said that "of the many lines of rail way which had been laid in that province, this was the first constructed without subsidy or any kind of aid from Government. Whenever the company required land, it purchased or obtained it without calling upon the State, a fact which manifested the spirit of progress that was daily being developed, and which had its greatest representative in the person of his friend Wheelwright." The latter in reply said, "that grateful as he felt for the compliment of Gov. Castro, he had no other ambition than that of honest industry." He recalled the fact "that he had arrived at that place, shipwrecked, almost without shoes to

his feet, that the inhabitants had received him cordially, and he was proud to be able to present that road, partially inaugurated that day, as a return for their never-to-be-forgotten hospitality."

Dr. Velez Sarsfield, the President's minister, praised the work of Wheelwright, taking care not to mention his name.

The little village of Quilmes, situated on the shores of the Plata, upon an eminence which commands a view of its waters, ten miles south of the capital, contained in 1872 a population of 2,500. Distant from Buenos Ayres by rail only half an hour, it may be said that it now forms a beautiful suburb of that city. More than one half of its territory belongs to English residents, although its population is chiefly made up of Basques, Italians, and North Americans.

After the inauguration of the railway as far as Quilmes, the work in the direction of Ensenada was actively prosecuted, and at the close of that same year (1872) the whole road was finished as far as the sea-port which Rivadavia indicated, and which Wheelwright actually gave to Buenos Ayres.

CHAPTER XXX.

INAUGURATION OF THE ENSENADA RAILWAY. — THE EVIL OMENS AT CORDOVA ARE REPEATED. — WHEELWRIGHT'S SPEECH ON THE PORT OF ENSENADA. — FROM THAT DAY PRESIDENT SARMIENTO OCCUPIES HIMSELF WITH BATEMAN'S PORT. — EXPLANATION OF HIS MOTIVES.

THE inauguration of the Ensenada railway took place on the 31st of December, 1872. The first sod had been turned by Wheelwright himself, in 1863, on the anniversary of Washington's Birthday. In September of the year 1865, the line was opened to Barracas, and a little after that a branch was finished to the Boca. The extension of this line to Ensenada was the event officially celebrated on the 31st of December. The object of this celebration and the cause of all the enthusiasm was the opening of a new port.

The most distinguished citizens of Buenos Ayres were present at Ensenada that day by Wheelwright's invitation. No sooner were the guests seated at table than it began to rain in torrents. A superstitious imagination would have believed that the heavens were weeping. It is certain that Wheel-

wright must have been sad at heart. The festival, like that of the Grand Central at Cordova, was at once beautiful and melancholy. It will be remembered that on the former occasion the President delegated to his minister the part of wounding Wheelwright by the shameful suppression of his honored name on the very day when the accomplishment of one of his labors represented a triumph of civilization for the Argentine Republic. He now assumed that part in person by his speech, in which he only spoke of himself, at a festival crowning an enterprise which was all Wheelwright's and which had no manner of connection with the Government. He did refer to him once, to be sure, but only to say that two years previous he had come with him by water to Ensenada. He commenced his speech in these words : " This is a great day for the Argentine Republic, — another new railway ! " — and the great man to whom the Argentine Republic owed that great day sat beside him unnoticed. According to the President, the greatness of the day consisted in the completion of a railway thirty miles in length.

Gov. Acosta, who made honorable amends for the President's omissions, as far as Wheelwright was concerned, did not mention the word " port," and yet it was a port after all which was the object of the

celebration. Wheelwright's speech was the only one which recognized this fact. It was full of instruction, and deserves to be remembered, as it was the last he ever made.

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"But the principal object we have in assembling here to-day is to inaugurate for public traffic the Ensenada railway, which unites this splendid port with the capital.

"This very year completes half a century since my first visit to Ensenada, when I first appreciated its natural advantages and immense commercial importance, which I have never since forgotten.

"Some ten years have now elapsed since I purchased of M. Lelièvre the concession which the provincial Government had granted for the construction of this line and began the work. I will not now stop to enumerate all the impediments and difficulties I encountered. But for the firm conviction that I have ever had as to the moral certainty of the incalculable benefits which this line would secure to this country, I should not have had sufficient resolution to persevere until the work were concluded.

"The splendid expanse of water which here we behold can be made serviceable for the vessels trading with the River Plate, affording a protection

against the winds and storms to which to this day they are exposed. The mere dredging a little at the bar will throw open this bay to the largest vessels, thus affording to the shipping interests as good a harbor as any to be had in Europe; and the splendid conveniences of this port invite the trade, as there will be commodious docks and wharves and depots; and whilst the inner port of Ensenada offers such conveniences, the outer harbor, protected by Point Santiago, gives convenient and secure anchorage protection against the terrible southeast gales which so often prove destructive in the roads of Buenos Ayres and on the coast. We need not wonder at the advantages of this port, which so excited the admiration of the distinguished Argentine patriot, Don Mariano Moreno, that he used every exertion to have it the real port of Buenos Ayres. For centuries Ensenada has attracted the attention of the mariner, especially the naval officers of this republic, of Spain, France, and England, and its advantages as an arsenal have always been highly appreciated. If that illustrious Argentine, Don Bernardino Rivadavia, whom I had the honor to know in 1822, when the port was surveyed, could have employed such powerful elements as steam and railways, it is not too much to say that long ere this Ensenada would

have been a favorite port, and be the maritime emporium of Buenos Ayres to-day, which would give to the trade every convenience and protection, and without the necessity of heavy port dues, thus saving the country millions.

"This profound commercial and progressive man, anxious to increase the foreign trade with his country, upon which, he considered, depended so much its prosperity, was convinced that the best way to attain this was by affording to commerce and navigation every possible convenience. At the same time he did not forget that Ensenada offered very powerful elements for the protection of the customs and national revenue, striking at the very root of smuggling. He studied the matter in all its bearings.

"The construction of the mole at Punta Lara, which, as you have seen, gentlemen, has been already begun, is with a view to offer immediate convenience to trade whilst the Ensenada port works are being carried out.

"Within four or five months I hope to see the vessels lashed to this mole and discharging their cargoes into the wagons of the railway, which will convey them to the capital, a business of but two or three hours, and at a price of, say two patacons per ton more or less — half the present cost of unloading in

lighters, etc. — and the merchandise conveyed to the city in covered wagons, and perhaps in charge of a custom-house officer. They will thus be no longer exposed to the weather, damage and robbery, and the customs will defeat smuggling.

“When the Ensenada improvements proposed are finished, the conveniences will be still further enhanced. There will be every convenience on the moles, and the handling of merchandise will be less. With these conveniences I believe that the movement may be estimated at from 1,000 to 2,000 tons every twenty-four hours, and that an equal quantity of produce can be loaded therefrom.

“It is to be hoped that the national Government, in view of the importance of Ensenada, will not offer any delay in affording its powerful aid for the execution of the works set forth in my petition, and which will be found in Mr. Coghlan’s report, as also an estimate of the cost, etc., which has been increased by the Board of National Engineers to 200,000 pats., recommending the works to the special attention of the Government. Mr. Coghlan believes that, with the help of a drag, one year will be enough to put the port in a fit condition to admit Ultramar vessels of regular size; but when it will become necessary to have a greater depth of water or new docks,

it will be necessary to draw up new plans and estimates.

"In concluding these few remarks, I fervently appeal to His Excellency the President of the Republic, that he will give me every help and assistance which so important a work for this country calls for, — a work destined to give to this republic one of the safest and best ports in the world, and which will be the pride of the nation."

We see from this that Wheelwright asked the aid of Government, not for his work of the railway, of which the pier at Punta Lara was an extension, but for the improvement of the port. He and his partners were the proprietors of the railway and of the extension to the water by the pier, but they had no jurisdiction over the harbor, for that was the property of the State. Hence the aid which Wheelwright asked of President Sarmiento resolved itself into a petition that he would discharge the duties of his office for the welfare of the country. But instead of acceding to this reasonable request, the President began to favor Bateman's scheme more than ever before. The \$200,000 which he refused for harbor improvements at Ensenada, he gave to a contractor resident in London, for the plan of an impossible port at Buenos Ayres, and, in addition to that sum,

he offered \$12,000,000 for the accomplishment of the work itself. It was a singular circumstance that the administration of Sarmiento never gave to this chimerical enterprise such earnest consideration as at the close of the year 1872, the date of the termination of the railway and pier at Ensenada, when improvements at the port of Buenos Ayres were entirely superfluous.

It must be admitted that in assuming this attitude, President Sarmiento did not have any personal ill-will towards Wheelwright. He was simply promoting his own self interest. Bateman's project, being impracticable, was more useful to him than that of Ensenada, because it furnished \$12,000,000 to the national treasury, where it would remain indefinitely, to be applied to the exigencies of his administration.

But besides, this opposition to Wheelwright's plans served his purpose in another way, namely, in securing his popularity in the city of the old port, by pandering to that ancient prejudice which preferred Bateman's scheme, although fantastic, to Wheelwright's, notwithstanding its practicability, because the former was in Buenos Ayres itself. As we said before, this policy did not proceed from any desire to injure Wheelwright personally, either on the part of the President or of his ministers. He was incapable

of inspiring enmity in any one, and their opposition sprang merely from the absence of a lofty patriotism like that which distinguished their countrymen, Rivadavia and Moreno, whose ideas Wheelwright was putting into execution. The latter was in a certain sense, engulfed in the same abyss which overwhelmed Rivadavia, for they both endeavored to promote the same cause of progress in spite of colonial routine cultivated by unscrupulous selfishness.

Such a short-sighted policy has not succeeded in crushing the spirit of civilization in the Argentine Republic. On the contrary, the countries of the La Plata have never ceased to advance during this century, even under the worst governments, not excepting the colonial administration itself. This is confirmed by history and demonstrated by reason, for they have within themselves the means of prosperity independent of governments. Their advancement, although partially due to their geographical position and advantages of soil, is attributable chiefly to the fact that the progress of those countries is in a certain sense the transatlantic progress of Europe itself.

Although many of these considerations may be thought irrelevant in a sketch of personal character, it is important to indicate clearly the responsibilities

under which Wheelwright labored, never incurring, by any imprudent act, a shadow of reproach with regard to his management of the many complicated affairs confided to his care by his numerous coadjutors.

In August, 1874, one year after Wheelwright's death, Mr. William Petty, an officer of the Royal Mail steamers, at the invitation of Mr. J. C. Simpson, made a visit of examination to the Bay of Ensenada. He was accompanied by several competent assistants, and the result of their investigation (as contained in a report published in the "Standard" of Buenos Ayres, of the 14th August, 1874) fully confirmed in every respect the representations made by Wheelwright. Mr. Petty says that he "found the port of Ensenada with a depth of water more than sufficient for anchorage at the piers themselves, the very day that one half of the ships at Buenos Ayres were high and dry." According to his report, the anchorage and means of discharging at the piers of Punta Lara and Ensenada for the steamers of the line, and in general for all large vessels, present the following advantages:—

First. That the voyage is shortened by forty miles:

Second. That in bad weather ships can be made

fast to the piers for discharging without the least risk to passengers, mails, or merchandise :

Third. That the pier at Punta Lara (1845 feet long) has a track laid down its whole length, and is distant from Buenos Ayres thirty-one miles, or an hour and a quarter by train :

Fourth. That the landing of passengers at the old port of Buenos Ayres requires three separate transfers ; one from the vessel to a small steamer, another to an open boat, another to a cart, and thence to the pier, where no carriages are allowed.

CHAPTER XXXI.

THE LAST DAYS OF WHEELWRIGHT IN THE RIVER PLATE.
—HIS LAST VOYAGE TO ENGLAND, AND HIS DEATH AT
LONDON THE SAME YEAR (1873).

WHEELWRIGHT's health, becoming feeble with his advancing years, could not sustain the annoyances of this life of struggle. He had yet much to do in the River Plate in order to conclude and perfect the works already in operation. There still remained unfinished that magnificent pier at Punta Lara in the port of Ensenada. The colonies which he had planted along the line of the Grand Central were to be increased under his fostering care, until they should form a model State in the Argentine territory. On the occasion of a visit to them in 1873, he was complimented with a breakfast given at Cañada de Gomez. "On that occasion," says a writer who was present, "Wheelwright predicted the prosperity of the country which had before it a grand destiny. He became enthusiastic with the force of his great ideas, remarking that, "before the lapse of twenty years the path of the Grand Central would only be

a continuous alameda, a boulevard of eighty leagues in extent, whose sides would be bordered with the most beautiful products of agriculture." He left those settlements which owed their existence to him to return to Buenos Ayres, with the sad presentiment that his eyes would never again behold those virgin and beautiful prairies which his genius had transformed into colonial centres of life and industry. The advice of his physicans induced him to leave South America for Europe about the middle of the year 1873. He embarked in a deplorable state of health, borne up as it were by the arms of those who accompanied him to the steamer. His physician, Dr. Olguin, was apprehensive that he would not arrive at his destination. Invigorated somewhat by the voyage, he had just strength enough to land at Southampton whence he proceeded to London. Attended by the best physicians, surrounded by the unwearied attentions of his loving family, and daily visited by his best friends, his health did not cease to decline till his valuable life was closed the 26th of September, 1873. His body was taken to North America by his son-in-law, Mr. Krell, and buried among his own kindred in Newburyport, Mass., the place of his birth. He had expressed this desire in his will. Although he had devoted the most

active years of his life to the improvement of South America, he never ceased to feel a pride in being a citizen of the United States. A friend of his, Capt. Aulick, of the United States Navy, thus wrote regarding Wheelwright to the Smithsonian Institute in 1845:—

“Although Wheelwright has resided in foreign countries for many years, and has been compelled to resort to foreign capitalists for the means of accomplishing his projects, having failed in his efforts to induce his own countrymen to embark in them, he has lost nothing of his well-known love of his native land. Bound to him by the ties of a long and intimate personal friendship, I can say with all assurance that there exists not in the country of his birth a more ardent and patriotic American.”

His immediate family who survive him are his honored wife, Mrs. Martha G. Wheelwright, who was his inseparable companion in all the movements of his active life, and his daughter, Mrs. Krell, so distinguished for her culture, amiable character, and Christian virtues. They both reside in England.

CHAPTER XXXII.

CONSIDERATIONS AND REFLECTIONS SUGGESTED BY THE
LIFE OF WHEELWRIGHT. — HIS INFLUENCE IN SOUTH
AMERICA CHARACTERIZES AND DEFINES THE CIVILIZING
ELEMENT OF IMMIGRATION INTO SPANISH COUNTRIES.

THE life of Wheelwright as a whole suggests an inquiry into the social condition of South America. In reflecting upon it, we are led to consider the type of the individual unity which goes to form the aggregate of what is called our modern society. To study men of his stamp, to imitate them, to reproduce them, is the way to introduce and acclimate in South America the society of North America, or, in other words, the liberty and progress of the Anglo-Saxon for the benefit of the Latin race. It is the best means of educating and transforming South America. Instruction alone does not educate the soul or form the character, except in a secondary manner. Indeed, it frequently leaves man in the plenitude of his primitive barbarism. Wheelwright's is therefore the ideal of the character needed by South America to enable her to emulate the progress of that society of which he was a native citizen. Representing pro-

gress, because he represents steam and electricity applied as forces to the service of man, he represents another and superior force, without which his works, however important, would be in comparison of little value, — probity, uprightness, honor in industry. This uprightness made Washington exceptional among men. His was a sterling manhood in the service of humanity. Industry also has its Washingtons, who know how to conduct it, as he conducted government, with the integrity of a man of honor. The mass of contractors is made up of the opposite type of character; but Wheelwright represented the healthful side of industry, — probity and moral principle in the means of acquiring wealth.

He is one of those model men whom biography, as an element of education, should place conspicuous on lofty pedestals before the eyes of the youth who are to constitute the future greatness of South America. To the moral qualities of a distinguished worker he united those of a superior intelligence, and a solid and varied knowledge of practical affairs. He was a real economist without the pretensions and formulas of the science.

In fact, but for his thorough understanding of political economy, Wheelwright would not have been able to attain to the conception of ideas so grand and

so complex as were those of his enterprises, nor would he have succeeded in convincing European capitalists of the necessity and profit of co-operation in his great labors to secure the interests of general commerce in those comparatively unknown regions.

CHAPTER XXXIII.

PERSONAL CHARACTERISTICS OF WHEELWRIGHT.—THE DEBT OF SOUTH AMERICA TO HIS MEMORY.

By the character and management of his enterprises, by his active, persevering, disinterested, and progressive spirit, Wheelwright represents that class of projectors, so rare and so much needed in South America, whose chief foe is the vast, unpopulated territory, which keeps the scattered inhabitants isolated and unsuccessful. It is not the smoke of battles, but that of locomotives which will set South America free from that despotism.

Wheelwright was an unselfish man. All who labored with him gained more than he did. He was of sober temperament, and luxury would have been superfluous to his simple habits of life. His luxury consisted in doing good to his fellow-men. The Christian religion marked every step of his progress, not often is one found who, like him, was willing to defray the enormous expenses of translating the Scriptures into the Turkish language for the purpose of promoting and propagating Christianity in the

East; but this sum was very small in comparison with the amount he bestowed in the course of his life. His gifts were made quietly, and without interested motive or semblance of vanity.

This man, who might have occupied palatial residences, had an unostentatious dwelling, Gloucester Lodge in Regent's Park, where he reposed at intervals, and in which he died surrounded by his affectionate family. His devoted daughter, who was the confidante of his great affairs, before her marriage was wont to lovingly complain of the mode of life the activity of her distinguished father imposed on his family, saying, "that they lived in their trunks." Busied in linking nations together, his home, the centre of his operations, was everywhere. Every country he visited seemed like his own, on account of the number of persons who attached themselves to him from motives of friendship and respect. There is scarcely an eminent man in South America with whom he did not come in contact. He had a personal acquaintance with Rivadavia, Portales, Prieto, Freire, Pinto, Bulnes, Montt, Blanco Encalada, Bolivar, Sucre, Flores, Gamarra, Santa Cruz, Ballivian, Urquiza, Carril, Fragueiro, Mitre, and Rosas, just baptized for liberty in London.

In the house of the present writer there met

by chance two distinguished men who filled South America with their fame, the one as the avowed disciple of Spanish policy in that country, the other equally well-known as the apostle of its progress. Each was settled in his own convictions, while their respective bearing towards one another was dignified and courteous. Their natural dispositions were fully displayed on this occasion, the Argentine ex-dictator always keeping the floor, while the descendant of the Puritans listened with attentive silence to doctrines with which he by no means agreed.

Wheelwright enjoyed in England the friendship and esteem of Lord Abinger, Admiral Fitz-Roy, and the celebrated contractor, Mr. Brassey, who was his partner in the Grand Central Argentine. The heads of the most prominent English and American commercial houses in South America were from time to time his associates and friends.* The nature of his enterprises, so linked with the administration of government brought him frequently into contact with

* His name was known and respected in the United States. I saw his portrait occupying an honorable place in the Patent Office, the Santa Croce, the Pantheon of Washington. A private letter of introduction from him to the Hon. Caleb Cushing, Minister of President Pierce (I was then in Washington on my way to London in a diplomatic capacity) was a sufficient credential for negotiating the transfer of Mr. Peden from Buenos Ayres to Parana, at that time (1856) the residence of the foreign diplomatic corps.

public men ; in fact, he was a public man himself, on account of his works of public interest.

In his person, Wheelwright was of ordinary height and of considerable corpulence, which, however, did not deprive him of the alertness of his race. His noble countenance was attractive in a remarkable degree, and inspired confidence at first sight. On meeting him, however occupied he might happen to be, he was invariably calm, grave and affable. He had that urbanity which requires neither study nor effort, but which proceeds from goodness and kindness of heart. He seemed to take more pleasure in listening than in talking. He was well acquainted with the Spanish language, writing it with ease and no small degree of accuracy. He had that good taste which is the result of superior intelligence. He was not fond of gay society ; a certain degree of retirement was indispensable to his arduous and multiplied labors, while it was in conformity with his simple and natural tastes. Although his whole life was one campaign of battles with every sort of obstacle, he never quarrelled with any one. That inherent courage, calm and unruffled, which suspects no danger, distinguished him in all the difficult situations of his life.

The tomb of Wheelwright is in the land of his

birth, in the country of Washington and of Franklin, of Fulton and of Morse. But while his ashes repose in distant soil, Valparaiso, the city perhaps more than all others benefited by his energy and industry, has not shown herself ungrateful to his memory. His full-length portrait has long graced the walls of her Merchants' Exchange, and now the Board of Trade has ordered a costly statue in bronze, which shall represent him for all time to come, so that posterity may behold in the public plaza the man to whom it is indebted for so much of its civilization and prosperity. Well may South America place laurels on the brows of her heroes of peace. They are the true soldiers of American liberty in modern times; they form the sacred legion of Washington, who turned his sword into a ploughshare the day he concluded the great war of his country's independence.

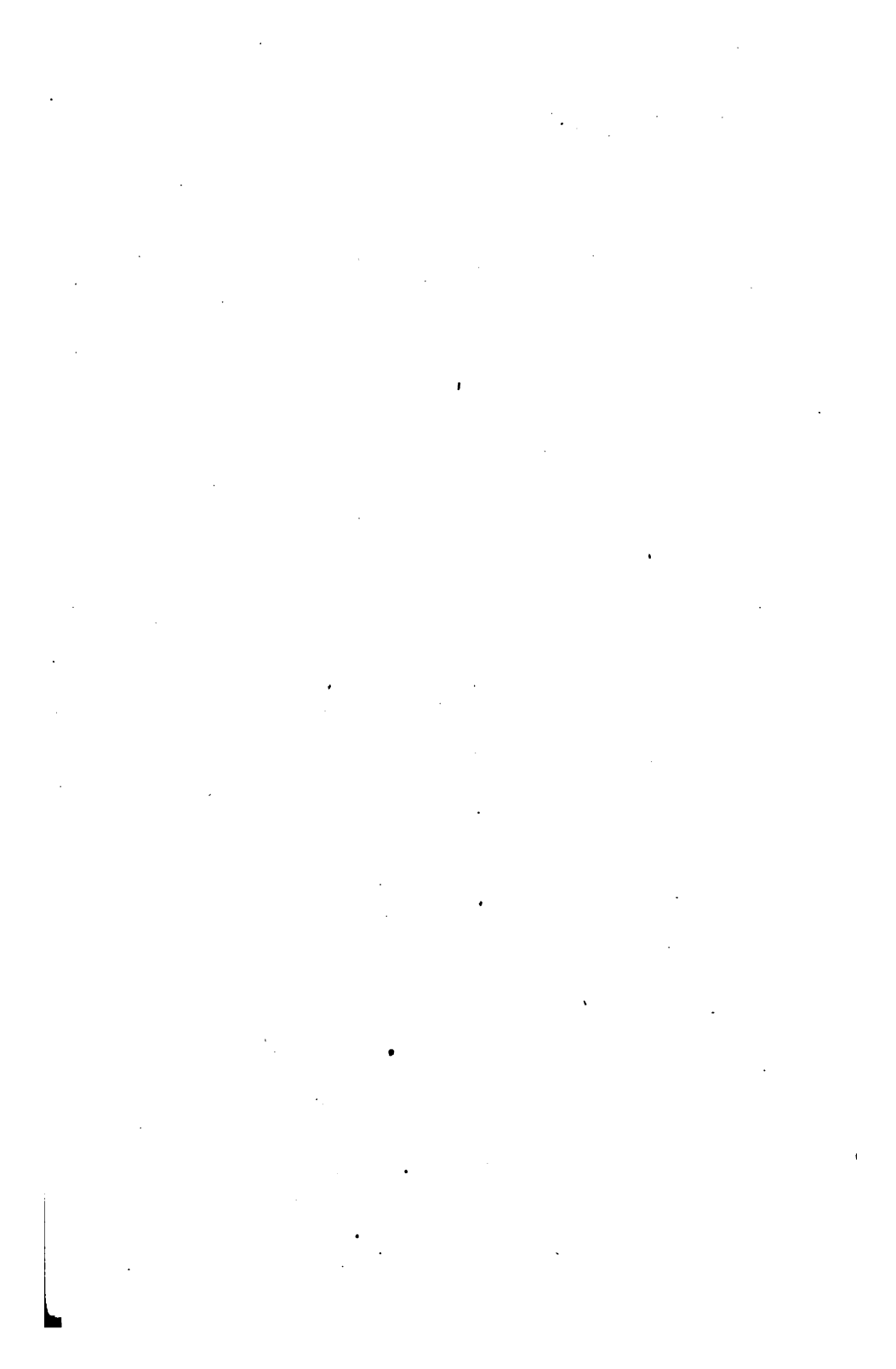
In South America, all statues which have been erected heretofore have been to perpetuate the glory of warriors. But to ennoble the warrior is to ennoble war, the calamity to which South America has been a victim. War may indeed be useful to those whose profession it is, but not to those who pay for it with the price of their blood as well as their money. To exalt the projector of useful works, on the con-

trary, is to augment the honor of peaceful arts, to stimulate them by the motive of merited glory.

In England, the most free and advanced country of the world, for one statue dedicated to a soldier, we find ten erected to great statesmen, inventors, or explorers. In one square in London stands Robert Peel, in another Pitt, in another Canning. The emblematic memorial to Prince Albert in Hyde Park is the world's monument of progress. This is not represented by great warriors, but by great architects, engineers, agriculturists, the great exponents of art and science. It is to such monuments that the new generations of great and free countries are to look for examples worthy of their imitation.



APPENDIXES.



APPENDIX A.

MEMORANDA

OF THE

LIFE OF WILLIAM WHEELWRIGHT.

1798-1873.

THE author of the Spanish work from which the foregoing translation has been made, as will be seen, has devoted his attention to such incidents in the career of Mr. Wheelwright as will be of the greatest interest to the people of South America, among whom he passed most of the years of his active life.

He has placed his public character in a strong light before his adopted countrymen, and thus held up for their respect and imitation a shining example of industry, perseverance, and what is of far higher value, undeviating rectitude in the management of the vast national enterprises committed to his trust. He has shown them how a man can at the same time be just to himself and to the public welfare; for every dollar of his well-earned fortune was but the simple interest on a capital of thousands which his energy and probity bestowed upon South America.

Animated by these grateful remembrances of the benefits conferred upon his country, Señor Alberdi has paid a just and noble tribute to the memory of a man whose virtues

he would enshrine in the national heart as more worthy of preservation than the deeds of military heroes who achieved the independence which would have been valueless without the introduction of those civilizing influences which he has recorded.

But in offering this translation to an English-reading public, those who have been engaged in the work and who are more conversant with the early history and the inner life of Mr. Wheelwright, cannot refrain from subjoining a brief account of some events which were not within the scope of the original production. Some reference to incidents already chronicled will, however, be unavoidable, but the main object will be accomplished. As Señor Alberdi has devoted himself chiefly to a consideration of Mr. Wheelwright's honorable public record, the translators, in the affectionate remembrance of his private virtues, his kindly disposition, his dispersive generosity, and above all of his sincere and ardent Christianity, bounded by no bigotry or sectarianism, do not deem a modest reference to these traits of his character inappropriate to the occasion.

The "Puritanism" to which Señor Alberdi refers, in which Mr. Wheelwright was educated, is a general term that a Spanish author, unacquainted with the various degrees of Protestantism, would naturally adopt; but in this case the word means something more specific. It was that old-fashioned New England orthodoxy which prevailed in the early part of this century, when the line was first distinctly drawn separating it from the more liberal theology of the present day. Had not the young lad who afterwards developed into such a useful manhood been as enterprising as he was, he might have lived to old age in his native town, where he

would, doubtless, have exercised a controlling influence in society and in matters of local interest; for whatever sphere he might have been placed in, he would have been its centre. But the early life of his father had been spent upon the sea, and in listening to the stories of the once active shipmaster, but now staid old merchant, the boy, fortunately for himself and for others, imbibed the spirit of adventure and resolved that he too would see the world.

His parents, with a more liberal consideration of the proclivities of children than is generally accorded to the young, assented to the fulfilment of his desires, but prudently balanced the youthful sailor with as good an education as the times afforded. It is needless to say that education then comprised religious training, without which any system would have been considered incomplete.

At the present day, when public opinion is in favor of discarding all religious teaching and even rejecting the use of the Bible in public schools, it may be well for us to consider the probable effect upon character which either method may produce. No one can peruse these pages, either in the translation or in what has been added to it, without conclusively attributing the success of Mr. Wheelwright, the happiness he enjoyed and which he conferred upon nations, to the instruction he received in his boyhood, and which was mainly derived from the sacred Scriptures. He was taught to regard them with the utmost reverence, his secular knowledge was all based upon them; and when he went out into the world he was thus fortified against its snares and temptations, so that his character as a man was formed out of a ground-work of New England orthodoxy and a superstructure of the knowledge of mankind.

To so adventurous a spirit, life at sea was naturally attractive. He became very desirous to take a short voyage in one of his father's vessels, and his parents, fearing to repress his youthful ardor, gave their reluctant consent. After several short voyages, he enlisted as a common sailor in a ship bound to New Orleans. By some mistake in the captain's reckoning, the ship was stranded on one of the Caicos Islands. Her cargo consisting partly of lime, she took fire, and the flames quickly enveloped the ship. In the hurry of escape, he risked his own life to save that of one of the crew, who had gone to his berth intoxicated. Their boat leaked so badly that they had to bail out the water with their hats. Reaching the shore, after travelling on foot a long distance through the tall grass, they found themselves in the vicinity of a large plantation, where they were hospitably received and kindly cared for. He ever after remembered his escape from the burning ship as a signal instance of the kind care of Providence.

His next voyage, in 1816, to one of the West India Islands, proved very injurious to his health, and for some weeks after his return his life was in danger; but he could not be persuaded to give up his chosen occupation, and, in 1817, took command of a barque for Rio Janeiro. The voyage was prosperous, and reflected great credit upon his integrity and capacity. On the return voyage he shipped a Portuguese sailor who proved troublesome and mutinous. One night, while asleep in his berth, Mr. Wheelwright felt a strong grasp upon his throat, but, awaking to the danger, succeeded in defending himself from the murderous assault till the mate came to his assistance.

His health not being fully established, after remaining at home for a little time he wished to embark in the ship "Pilgrim," of which some of his friends were officers ; but just as she was about to put to sea a summons from his father recalled him. The "Pilgrim" sailed for her destination and was never again heard from.

In the year 1823 he commanded the ship "Rising Empire," owned by William Bartlet, Esq., of his native town. He had proceeded on his voyage to the River La Plata, when the ship was stranded on the Ortiz Bank, near the mouth of the river. She here became a total wreck, with the loss of one of her crew. The ship's company took to a boat, in which, after rowing day and night, they reached the shore. They were supplied with food by some Indians, who had been conciliated by a present of three or four muskets which had been saved from the wreck

On Mr. Wheelwright's arrival at Buenos Ayres he made known his destitute condition, and a gentleman of that city offered him a situation as supercargo of a vessel about to sail for Valparaiso. He gladly accepted the offer.

He now became acquainted with the west coast of South America. In 1824 he took up his residence at Guayaquil. There being then little communication with South America, months and even years elapsed without any intelligence from him, which caused his parents and friends great anxiety. At length a ship bound to Salem, Mass., brought a letter from him. The following is an extract:—

"After the loss of the ship, I became weary and worn out with misfortune. Distance and active business, I hoped,

would in some measure obliterate painful memories. The course I pursued has had that effect.

“Since my arrival in the Pacific I have not been free from trouble ; I have been obliged to combat innumerable difficulties. I have now good prospects, but am far from being elated.

“More than two years have elapsed and I hear nothing from home. I am in anxious suspense. Who knows what sad changes may have taken place?”

A great sorrow which came upon him during a former absence explains these gloomy apprehensions.

In 1825 he was appointed United States consul at Guayaquil. During the civil war which succeeded the great struggle for independence in that country, his house was an asylum for the refugees of both political parties.

He gladly received and entertained a young gentleman who had been sent to Peru by the London Bible Society, for the purpose of distributing the Scriptures. He regarded Mr. Matthews as the pioneer of Christian civilization in Spanish America. After his departure for his mission in the interior, Mr. Matthews was never heard from, and it was feared that he perished in one of the mountain-passes of Chimborazo. Mr. Wheelwright deeply lamented the death of this young missionary, sometimes fearing that he fell a victim to his zeal in circulating the Scriptures.

Two or three incidents occurring at this period are worthy of note. Riding on horseback in company with two gentlemen on the road from Callao to Lima, Mr. Wheelwright, being a little behind, was attacked by two highwaymen.

His friends, whom he presently overtook, exclaimed, "What is the matter? You are covered with blood." It was found that one of his wrists was broken. He told them that, after having his horse and his purse taken from him, hearing one of the highwaymen say to the other in Spanish, "Let us dispatch him," he offered his watch, which they perceived to be a very valuable one. They then left him.

Some time after he was thrown from his horse while travelling in the interior, and dislocated his shoulder. After much suffering, the bone was replaced by a skilful Indian.

Mr. Wheelwright was cast on the shore of South America at a most critical period of its history. In the memorable speech of Daniel Webster, on the 17th of June, 1825, occurs this passage: "Among the great events of the half century, we must reckon certainly the revolution of South America, and we are not likely to overrate the importance of that revolution, either to the people of the country itself or to the rest of the world. When the battle of Bunker Hill was fought, the existence of South America was scarcely felt in the civilized world. The thirteen little colonies of North America habitually called themselves the Continent. Borne down by colonial subjugation, monopoly, and bigotry, those vast regions of the South were hardly visible above the horizon. But in our day, there has been, as it were, a new creation. The Southern Hemisphere emerges from the sea; its lofty mountains begin to lift themselves into the light of heaven; its broad and fertile plains stretch out in beauty to the eye of civilized man; and, at the mighty bidding of the voice of political liberty, the waters of darkness retire."

Spanish America, just emerging into independence under Bolivar, the celebrated Liberator of Peru, the American Board of Commissioners for Foreign Missions resolved to inaugurate some measures for the benefit of the people. Mr. J. C. Brigham was selected as their agent. Mr. Wheelwright, having had some previous acquaintance with this gentleman, gladly extended to him his hospitalities.

Mr. Wheelwright's marriage with Miss Martha G. Bartlet, daughter of Edmund Bartlet, Esq., took place at Newburyport, Mass., on the 5th of February, 1829.

They were soon on their way to Panama. The voyage proved very uncomfortable, through the faithlessness of the owner of the vessel in which they had embarked, although every assurance had been given that ample stores were provided for the comfort of the voyage. They landed at Carthagena, where they were delayed waiting for a vessel to take them to the Isthmus, which they crossed on mules, there being then no other conveyance.

On arriving at Panama they received many kind attentions, flowers and fruit and other testimonials being presented as a welcome to Mrs. Wheelwright. They proceeded to Guayaquil, where they also received most gratifying proofs of the kindness of the people.

Mr. Wheelwright had entertained fears in regard to his business during so long an absence. These fears were soon realized. His property, which he had estimated at one hundred thousand dollars, had all been lost through mismanagement, and he found himself obliged to commence life anew.

He soon transferred his residence to Valparaiso, where he continued many years. He made arrangements to revisit the coast, purchasing from his brother-in-law, in New York, a small schooner patriotically named "Fourth of July."

His friend, Mr. William Clay, a merchant of Valparaiso, who accompanied him on one or more of these voyages, says: "I well remember during a passage in this little schooner his communicating to me that which proved to be the incipency of his first great enterprise,—the introduction of ocean steamers on the Pacific. His mind, I am confident, was in those days imbued with great thoughts, reaching above and beyond the present. His recognition of God's providence, so frequently alluded to in his writings, confirms my estimation of his true Christian principles.

"A retrospect of the years 1829-30 brings vividly to my mind associations and event sconnected with a period of time passed on the then distant shores of Chili and Peru. Among these memories none afford more satisfaction than a recurrence to my acquaintance and intercourse with Mr. Wheelwright, from the time he reached Valparaiso with his estimable wife. . . . He was not discouraged by adversity, and his self-reliance and careful attention to business soon placed him in more favorable circumstances.

"Possessing a remarkably active and observant mind, he seemed to appreciate at once the unquestionable merits of the Ensenada Bay, and then it was that he first became convinced of the great commercial advantages to be derived by Buenos Ayres from the construction of a port at that place."

In the year 1835 Mrs. Wheelwright returned to the United

States with her two children, Maria Augusta and Marianita. The climate, however, proved too severe, and the youngest child, of two years, deceased December 18th of that year.

Mr. Wheelwright was not one of those whose principles change with their locality. His brother, who was with him during his early residence in Valparaiso, relates that "some young Germans and Englishmen at the boarding-house made a practice of playing 'at cards on the Sunday. Finding all remonstrance on his part unavailing, he expressed to the landlady his resolution to leave unless such practices were discontinued. His wishes were at once complied with. He could never tolerate anything that was debasing in conduct or language among those around him."

One well acquainted with Mr. Wheelwright's history (Mr. C. R. Markham) gives the following interesting particulars:—

"In 1835 Mr. Wheelwright commenced his great task of establishing a line of steamers on the west coast of South America. This was an undertaking of much difficulty. There were prejudices to be overcome, capital to raise, and negotiations necessary to be carried out,—all of which required great skill and patience. Mr. Wheelwright was a man of strict probity, and in this lay the chief secret of his success; but he possessed also talent, unwearied energy, perseverance, and a genial disposition. Carrying with him the privileges he required from the republics of Peru and Chili, he went to England in 1837. He met with great assistance in his project from the Hon. P. C. Scarlett, then a young *attaché* who had just travelled through Peru and Chili. He was also

enthusiastically aided by Sir Edward Parry and Captain Fitzroy; but if he obtained that for which he sought, it was chiefly due to his own efforts, to the data that he had collected, to the extent and exactness of his calculations, and to the confidence with which he inspired capitalists. The Pacific Steam Navigation Company was formed in 1838, with a capital of £250,000, and two steamers, the 'Chile' and the 'Peru,' of 700 tons and 150 horse-power each, built by Messrs. Charles Young & Co., of Limehouse. In a letter to Mr. Wheelwright at that time, Captain Fitzroy said, 'I cannot do less than express my admiration for the patience and integrity which you appear to have displayed during the four years devoted by you to the preparation of this great enterprise.'"

Whilst in London, seeking aid for his great scheme, he wrote to one of his sisters:—

"I have had much to struggle against. The cheering voice of encouragement, when I arrived in this country, I never heard. On the contrary, my plans seemed Quixotic to that extreme that I could not obtain attention, and I dared not list my views. Recently this feeling has gone by in part. I have much to do; it is a Herculean task, and I sometimes think it was imprudent to undertake it alone and with such slender means. Perhaps I am deceiving myself, but I have ever felt a confidence of success; how it will result remains for time to tell us. My introduction to this country was good, and if my project is not viewed with favor, I cannot complain.

"I receive many personal attentions here. Naturally I

have associated with a wide diversity of character, one day being honored with the society of noblemen, and the next entertained by the very humble. I have had a better opportunity, since I have been in England, of forming estimates of character than I ever had before. But for the gnawing anxiety which I have always felt for my project, I might have had a great deal of enjoyment; but my mind has been so constantly surcharged with deep and intense thought that I could not enjoy society. There is not much philosophy in allowing one's self to become such a slave to feeling.

“Last week I attended a meeting of the Geographical Society, where there were present three or four hundred of the first men in England. Conceive my surprise to hear myself called upon to give the Society a general view of my plans. At first I faltered, but on the whole did much better than I expected, and my friends expressed great satisfaction. It was hardly fair not to give me some warning. I should have rejoiced greatly in an opportunity so favorable for the development of my views, had I been prepared; but on the whole it has done great good, and has elicited a spirit of inquiry among the most intelligent of the community. The statements I am giving to the public through Mr. Scarlett's book, entitled ‘South America and the Pacific,’ will shortly appear. You will like to see my appeal to the British public in behalf of my plans. For the last four months I have done little or nothing but go to and from the Foreign Office of the Board of Trade and the Admiralty; and, contrary to the expectations of all my friends, I succeeded in my object, and gained a favorable influence to the furtherance of my

plans. Let what may come, I must go on ; my reputation demands it."

During his long detention in England, he found sources of enjoyment. A friend of his boyhood, resident in London, Mr. Angier M. Perkins, son of Jacob Perkins, Esq., showed him every mark of kindness and attention ; and his friendship with every branch of this family continued to the latest period of his life.

He had projected the Pacific Steam Navigation Company in 1833 ; but, as he says, " years of toil and anxiety rolled by before I could induce English capitalists to enter into my plans."

At length Lord Abinger greatly aided and encouraged him, and he ever after felt most grateful to him, and continued to be on terms of warm friendship with him and with his family. His friends in Valparaiso, by whom his efforts were appreciated, also extended to him their sympathy and aid.

Writing his parents from Liverpool, Jan. 1, 1838, he says, " I feel as though it were almost criminal in me to remain so long from my family, but such has been my situation that to have left would have been a complete abandonment of my project. Had I fancied for a moment the time and money that this enterprise would cost me, I should not have dreamed of undertaking it ; my duty to my family and myself would have forbidden it.

" I have received both your letters. My dear mother's was short, but very grateful to my feelings. Such sentiments inspire me with new courage in the pursuit of my object."

At Valparaiso, Henry V. Ward, Esq., was his most congenial friend. He saw in this gentleman that uprightness of character and that devotion to principle which secured at once his entire confidence, and which resulted in a warm friendship and a long and unbroken correspondence. He often speaks of the satisfaction and pleasure which was afforded him, through so many years, by this interchange of thought and feeling. He greatly needed some friend in whom he could repose confidence.

In a letter addressed to Mr. Ward, soon after forming the steamship company, he says, "The time will arrive, possibly, when my memory, at least, will find some justice." This is the only intimation of the kind to be found in any of his letters.

Not long after the arrival from Europe of the steamships, an accident to the "Chile" threatened ruin to the enterprise. Mr. Wheelwright at once ordered a bulkhead to be constructed to keep the ship afloat, and then, though she was in so crippled and dangerous a condition that the other steamer accompanied her to protect the lives of those on board, he took her to Guayaquil, the only port on the Pacific coast where the needful repairs could be made. When these had been completed, she steamed back to Callao, where her arrival was greeted with unbounded enthusiasm. Mr. Wheelwright says, "A gay and interesting scene it was. The Malacon was entirely filled with people from one end of the city to the other. Capt. Peacock came close along the wall and managed his steamer in his usual style. Passing down again we returned once more, throwing up rockets

and burning blue lights ; the entire front was illuminated, and I do not know when I have witnessed a more thrilling scene."

In another letter he says, "It seems to have been determined that, if steam does succeed here, it must be in spite of innumerable obstacles. When I find myself still breasting difficulties at every step, I almost lament my success."

The want of coal for the steamers turned his attention to mines, the working of which developed a new industry in South America. In 1841 he sent by his brother a petition to the government with respect to a railroad across the Isthmus of Panama. He had spent much time previously in reconnoitring, passing many days at Gorgona and along the river Chagres. He reported no obstacles but such as could be overcome, although at considerable expense. The company expressed themselves well satisfied with his report, as also did the President of Bogota, his personal friend, who never failed to cheer him by letters when he could not otherwise aid him. But the Congress of Bogota refused to "vote away their territory to foreign capitalists, when they had the means of constructing their own roads."

Writing to Prof. Silliman, from Lima, in 1842, he says, "I have just returned from Panama, having passed the last three weeks in that vicinity. Aware of the existence of coal in the province of Veragua, I embarked at Panama for Cherokee. The coast I found lined with an archipelago, the islands so closely studded together in some parts as to give them the appearance of being the main-land. Passing behind several of them we proceeded to the place pointed out

where coal had been obtained. I found the geological formation very similar to that of the south of Chile, and the coal cropping out at the edge of the water; the height of the cliff above high-water mark is about twenty or twenty-five feet. Returning I commenced sinking a shaft to cut the vein, which work I left in progress, under the superintendence of an agent. . . . I returned to Panama, and on the voyage I suffered severely from fever contracted from exposure in the dense forests of the island. Most of the crew were also affected, it unfortunately being the rainy season."

It was a great satisfaction to his parents and friends to receive a lithograph copy of the portrait from Valparaiso, which was so honorable to him and so well executed. They regarded it as a kind gift from the friends who had thus manifested their appreciation of the services which he had rendered. The inscription in the Spanish language has been thus translated: "At a general meeting of the Valparaiso Chamber of Commerce, held Jan. 15, 1842, under the presidency of the Hon. John Walpole, British Chargé d' Affaires, it was unanimously resolved to place in the Reading Room of the Valparaiso Chamber of Commerce, the portrait of William Wheelwright, Esq., executed at the expense of the members of said Society, as a testimonial of the respect and high estimation which his character merits, and as a proof, as well of their admiration of the enterprising spirit which conceived the project of steam navigation upon the Pacific, as of the indefatigable zeal and perseverance, which with signal success carried forward to its realization this stupendous enter-

prise, thereby conferring the greatest and most lasting benefit upon their nation, and particularly upon Chili, having opened up a new source of riches and of power, by working the coal mines, hitherto hardly known and entirely undeveloped."

As superintendent of the steamship company's operations, Mr. Wheelwright was giving all his energies to the great enterprise which he had himself created, when he was suddenly apprised of a conspiracy to supplant him. His feeling was intense. He writes his friend, Mr. Ward (Oct. 22, 1844):—

"What shall I say to you? To-day my philosophy forsook me. I wrote you that, so soon as the Directors of the Pacific Steam Company found that I had taken measures to extend the line to Panama, they sent in their application to government to underbid me, and I received a note from Admiral Bowles to-day, stating that I was thrown out, the Directors of the Pacific Steam Company having offered to contract for a smaller sum.

"I felt what Byron so beautifully describes as the cause of the premature death of Henry Kirke White:—

"So the struck eagle, stretched upon the plain,
No more through rolling clouds to soar again,
Viewed his own feather on the fatal dart,
And winged the shaft that quivered in his heart.
Keen were his pangs, but keener far to feel
He nursed the pinion which impelled the steel,
While the same plumage that had warmed his nest
Drank the last life-drop from his bleeding breast."

"This you will think rather too poetical for a steam man, or a man of business, but I drew consolation from it by

reflecting that my exertions had secured the great object of my life, and that, however the world might view it, I had the gratification of knowing that fact."

It is pleasant to record that the plot failed.

In a tour of exploration to the mines of Potosi, Mr. Wheelwright narrowly escaped being buried in a mountain-pass by a fall of snow. Just before reaching the summit, his guides, becoming disheartened, refused to lend any assistance, and were ready to lie down and die rather than go forward. The stimulants he had taken with him in case of exigency, he was obliged to administer by force, so overcome were they with fatigue and exposure. Night coming on, an excavation was made in the snow, in which his bed, called "Almanfrez," was placed, a covering of leather being drawn over it. His guides and mules were protected in a similar manner. They found shelter the next night in an old, time-worn monastery. On leaving he took with him a small lump of silver embedded in a shell, showing that the mountain had once been submerged.

In 1849 he undertook the construction of the railway from the new port of Caldera, created by him, to Copiapó,—a distance of fifty and one half miles, with a maximum gradient of sixty feet to the mile, and which terminates at a height of 1,327 feet above the level of the sea. The line was constructed in 1852, the port of Caldera was extended, and in 1854 a branch line was constructed to Chañarcillo, overcoming an elevation of 4,470 feet, and another towards the north, to the great mineral district of Tres Puntas, which terminates at an elevation of 6,600 feet.

Writing from Caldera, in 1851, he says, "I find it necessary to be here; people get tired of this desolation, this Arabian desert; their spirits flag, and they need some one to cheer them. I have before me an arduous duty for two months, and perhaps it will be good for me, and will separate my thoughts from the subject which has more than anything estranged and embittered my feelings." Referring to his first visit to Caldera, when he had a cave for his lodging-place, he says, "Thus the first nucleus, the cave of Caldera, is likely to become, at no very distant day, the great rendezvous on the Pacific, and the means of communication with the great Anglo-Saxon empires springing up in New Zealand and New Holland, and other isles of this vast ocean.

"We have five vessels discharging timber and iron, and all hands are busy as possible; it is quite a bee-hive of industry."

"STEAMER BOGOTA, 1853.

"We embarked on board this steamer, leaving Aspinwall on the morning of the 17th. We reached the terminus all right. The bridge is nearly completed. It seems to be very substantial, but it is extraordinary to me that shrewd practical men should not have adopted iron, as the only material which will stand the climate.

"The road to Barbacoas has been a Herculean work, a work which reflects immense credit on the engineers, and those who have been overseeing the operations. For my own part, all the money in the world would not have tempted me to undertake the construction of a road through that deadly swamp. We embarked at Baraccas for Cruyes, a

voyage of about six hours. Rain commenced falling, and it soon came in such a deluge that the river commenced swelling, and at night we were still a mile below Gorgona. The torrent came down, and we made fast to a tree, where we found some slight protection from the drift-wood and immense trees which came rolling one by one within a yard or two of us. One blow would have demolished the boat. The river had risen some thirty feet in a few hours. We passed one of the most dismal and fearful nights I ever experienced; the dawn of day was never more welcome to half-drowned voyagers than to us. When the rain ceased the river fell rapidly, and we finally succeeded in reaching Gorgona, where we spent the night, the river being still dangerous and the torrent rapid."

In March, 1853, Mr. Wheelwright visited his home. Writing to his parents afterwards he says, "I cannot express to you how much pleasure my visit has afforded me, — so much that nothing but imperious duties would have compelled me to cut it short. We must hope that it may be repeated, for I am resolved that no circumstances under my control shall induce me to enter into any new engagements which are to separate me longer from Newburyport, where my affections and sympathies are concentrated. My long absence, instead of drawing me off from the pleasures of home, has produced the very opposite effect, and now that I have arrived at an age just approaching the limit of our lives, I look to home as an asylum, a resting-place, where the remnant of my years is to be passed in quiet and preparation for the life to come.

"In the retrospect of my life,—a life so checkered and extraordinary, a life abounding in rich mercies,—whatever has been my success I owe it all to that kind and bountiful Benefactor, to his restraining grace which has kept me from falling, and I desire to be thankful for his abounding goodness."

His father's death took place in less than two years from the above date, his mother surviving six months later, both of them having reached the period of ninety years. On intelligence of her illness he hastened home in 1855, accompanied by his wife, and found her still living and able to welcome him.

Within a few years after the death of his parents, three of his sisters, to whom he was much attached, were also removed by death.

In his album, after his decease, there were found some beautiful verses with this inscription: "To my mother."

After the death of his eldest sister he writes his friend, Henry V. Ward, Esq., "I feel the loss of my sister most deeply. Her whole life was a beautiful illustration of what a Christian should be,—joyous in the midst of afflictions, submitting to the righteous dispensations of Providence with that faith which allowed no cloud to intercept her vision. I am in thought still with her; her excellence, her cheerfulness, her wit and love,—these are themes of delightful retrospection. . . .

"When I travel through this beautiful country and this enchanting scenery, my mother is my companion. She loved to look upon all and exclaim, 'These are thy glorious works, Parent of Good!'"

He writes afterwards, "There is certainly no country in the world so spontaneous in flowers and fruits. Nothing can exceed the beauty and variety which we find in our garden; it is a brilliant carpet of the most admirable combinations of colors. The roses, in all their charming variety, fill the air with their fragrance."

He writes Mr. Ward, Sept. 27, 1854 :—

"You will see by the papers that the government of Buenos Ayres has granted me the exclusive right of making a railway between Rosario and Cordova, and we may cross the Cordilleras in a month or two on our way home. I suppose you will consider me little less than mad, but such is my nature; and with life and health and peace in these provinces, I shall carry it through probably."

At the expiration of four or five months he writes:—

"I am happy to say that I have received a report from the exploring party, and, although the elevation is greater than I apprehended, it is quite clear to me that the route is perfectly practicable for a locomotive line, and the time will arrive when it will be carried into effect. The Atlantic and Pacific coasts will be connected by a journey of two or three days."

"LONDON, June 22, 1857.

"To HENRY V. WARD, Esq.:

"To-day I saw the 'Agamemnon,' the ship destined by the British government to assist in carrying the electric cable, whereby, if successful, we may interchange thoughts at the same moment.

"I brought home with me a small piece of the cable which

is destined to accomplish that which, if we attempt to compass it in thought, only seems to teach us that our very knowledge is ignorance. 'It is too wonderful for us,' must be our exclamation: we only know the fact, and are silent."

It might reasonably be expected that Mr. Wheelwright, of all living men, would be foremost in welcoming the invention of Morse. Occupied as he had been for a lifetime in schemes so grand and comprehensive for facilitating intercourse between men and nations, how natural from his lips are words like these:—

"The more I reflect upon this mighty and wonderful agent, the more I am inclined to be silent. It seems as if the great God had loaned us this mysterious element in order to the fulfilment of the words of Holy Writ, which foretell a period of the union of all nations in one brotherhood, when there will be peace on earth, good will to men."

In this connection we quote the following: "Not long before his death, Mr. S. F. B. Morse was in an office where a telegraph was in operation. Looking at it thoughtfully, he said to a friend, 'It does not seem to me that I contrived that machine, but rather that God inspired me to make it,—that he suggested to me the idea of it, and guided me in its construction.'"

"In 1855," says Mr. Markham, "Mr. Wheelwright conceived the great idea of constructing a railway across the Andes, to unite Chili with Buenos Ayres. He believed that it would be easy to find practicable gradients, and organized a staff of engineers to survey the line, thus realizing a valuable geo-

graphical work, making a complete section across the Andes from Copiapo to Fiambala. In 1859 he was elected a Fellow of the Royal Geographical Society, to which he directed a most interesting communication upon the proposed road between Caldera, in Chili, and Rosario, upon the Parana, calling at Cordova; it was read at a meeting of the Society held on Jan. 23, 1860.

“The same year he went to Chili with his family, and I was his travelling companion in the steamer along the west coast. I disembarked at the port of Pisco, on Feb. 29, 1860, for the purpose of seeing the splendid iron mole, nearly half a mile in length, which Mr. Wheelwright had constructed for the embarkation of merchandise in that great centre of the wine and spirit trade of Peru. Mr. Wheelwright was accompanied by his wife and son, — a youth of great promise, who died prematurely a few years later, — and all were enthusiastic over the great project that was about to be submitted to the Chilian government. The survey had been made in all its extent by Mr. Edward A. Flint, in 1859, and included two tunnels on the Chilian side, the highest level reached being in the pass of San Francisco, where it was 15,023 feet above the sea. The line penetrated a region rich in copper, sulphur, lead, zinc, and salt. The distance between Caldera, on the Pacific coast, to Rosario, on the Parana, was nine hundred and thirty-four miles.

“The Chilian government believed this enterprise was too vast to be then realized, and Mr. Wheelwright, nothing daunted, resolved to begin the line on the opposite side, at Rosario, and this took him anew to the Argentine Republic,

which he had not seen since his shipwreck off Cape Corrientes, in 1823. On March 16, 1863, Gen. Mitre, President of the Argentine Republic, signed the concession to Mr. Wheelwright and Mr. Brassey, to construct a railroad between Rosario and Caldera. Since then until his death, Mr. Wheelwright came and went between London and Buenos Ayres, active and indefatigable as ever, at an age when most men seek for repose, for he had attained seventy years. The railway progressed rapidly, and he alternated these labors with others for the progress and colonization of the country. In the concession he had obtained the grant of a league of land along the entire length and on each side of the line between Rosario and Cordova, and took the greatest interest in the establishment of farms and colonies on the lands of the company. He also conceived the idea of giving Buenos Ayres a port on the Atlantic coast, and chose Ensenada, twelve leagues to the south of the capital, with which he at once united it by a railway.

“On May 17, 1870, the railway between Rosario and Cordova was inaugurated, this being the second great work of Mr. Wheelwright. The same year he returned to London, and received the news of the death of his colleague, Mr. Brassey. After visiting for the last time his native country, Mr. Wheelwright, who was now seventy-three years of age, returned again to Buenos Ayres in 1871, and in April, 1872, handed over to the public service his last enterprise, — the Ensenada railway, which he had carried to Quilmes, on the banks of the River Plate; at the end of the same year it was completed to Ensenada, being inaugurated on Dec. 31, and in

1873 the brave old man, active to the last, returned to England with his health completely broken."

Wishing to promote the moral and religious welfare of the American and English residents, Mr. Wheelwright procured, entirely at his own expense, the material for the Protestant Church now erected in Callao. The frame was constructed in his native town, under his personal supervision, and was sent around Cape Horn in January, 1861.

The death of his only son, which took place in 1862, at Kew Green, London, was a severe affliction to his parents. He had attained to the age of twenty-two years. He possessed much of the spirit of enterprise which characterized his father. "His condition," his father writes, "fills us with grief and anxiety; he has my earnest, constant prayers that he may be sustained by Divine grace. I have never seen any one so uncomplaining and patient. My consolation is to leave him in the hands of a merciful God."

In a letter dated St. Vincent, 21st December, 1862, he says, "Since we left Lisbon we have suffered a great affliction. Our little boy (a grandson), the idol of our hearts, has been taken from us and consigned to a watery grave. He continued to decline until midnight of the 17th, and after a hard struggle passed from us to his heavenly rest."

We give here some extracts from the "Buenos Ayrean Standard":—

"CORDOVA, May 3, 1863.

"When Mr. Wheelwright arrived here on his philanthropic mission, we hailed him as an apostle of industrial

enterprise. The veteran concessionaire came not among us to speculate, or gain a reputation, but to add one more crowning glory to a career already identified with South American regeneration. After half a century of toil he might have honorably sunk into peaceful retirement, but his active mind is little disposed to feed upon past glories, or recount what he has done, when there is yet opportunity to do more. The recent death of his only son would have unnerved him in the pursuit of his grand object, did he not view his genius and labors as the property of mankind, to leave an inheritance, not to a beloved relative, but to the great Argentine family. Let it not be supposed that we mean to flatter an individual whom we have but once seen; the statesman, phrenologist, or historian will readily admit that the hero of the Cordova railway is a man of no common stamp, and that energy, perseverance, integrity, and foresight form the leading features of his character. In thirty days, we are told, the signal-gun will be fired from Rosario (although we doubt if it can be so soon), and the reverberating echoes will announce to the distant provinces that a new era has begun, which will free them from a bondage more degrading than that of the vice-royalty, more baneful than that of Rosas,—the chains of obscurity and sloth.”

The same paper, giving an account of the great Argentine railway, says, “Victory crowning this work, Mr. Wheelwright looks from the lofty summit of the Cordilleras and sees beyond their rugged, snow-covered peaks, the rich plain lands, the pampas of the Argentine Confederation, stretch-

ing for 800 miles to the margin of that full-flowing river, the La Plata. He says, a railway must leap over these summits, it must cross those fertile wheat lands, whose soil is richer than the plains of Marengo, and only equalled by the prairies of the West. That stately river, by whose banks the old Roman ox-cart with creaking wheels drags its slow length along, must be ploughed by steamers, as Providence designed it to be, and the Atlantic and Pacific must be joined, — the resources of the country must be developed, etc.

“In 1857 this seemed the dream of a visionary. In 1863 Mr. Wheelwright lands at Buenos Ayres, and he, the most modest, the most unostentatious of men, the most averse to display, is received by the government of Buenos Ayres with regiments of soldiers and salvos of cannon. He is hailed as the regenerator of a land whose soil, for nearly half a century, has been watered with blood spilt by political ambition.”

In 1865 Mr. Wheelwright says, in one of his letters, with respect to the great Argentine road, “When I consider my age and the work I have undertaken, I am astonished at myself. If Providence continues to me health and strength to carry out this great work, I shall feel very thankful; but at all events I have commenced it, and shall do all in my power to bring it to a successful issue. I see nothing to alter my opinion in regard to it; the more I study it the more I am convinced of its great merit. It will become one of the most paying roads in the world; it has an enormous trade in store for it.”

He writes his friend H. V. Ward, Esq., —

“ ROSARIO, May 6, 1865.

“ We returned last week from Cordova. I met there with a very warm reception, for which I was quite unprepared ; they seemed to look upon me as the regenerator of the country, all their hopes being fixed upon the railway, which, no doubt, is to work marvels, and to raise the city to an eminence which no one can limit, placed, as it is, in the centre of this vast country. Under priestly rule and shut out from the world, with nothing to excite them but political matters, they are in continual disputes. I called upon the Bishop, a fine, tall, elegant man, simple and unpretending. He gave me a most hearty welcome, fully appreciated the value of the railroad, and expressed the most liberal and earnest sentiments in its behalf. I confess I was rather surprised, as I had been told that it was looked upon by the clerical party with jealousy. He observed that there were some of the clergy who entertained different views, but they were short-sighted, and understood but little of its advantages.

“ In approaching the city from the plains, the first view is of the spires of ten churches, all clustered together and all perfectly white, giving a very fine effect in contrast with the dark hills in the rear. You descend about one hundred feet from the plain to reach the city, which is well built, clean, and has more resemblance to a European town than is usual in this country. The modern houses are in the Italian style of architecture, well adapted to the climate.

“ The city is about four leagues from the first mountain range, within reach of the inhabitants, who, in the heat of summer, can find a climate cool and refreshing. By

ascending the mountains, which are from six to seven thousand feet high, they may find even a cold region. I have never seen a place, I think, where so many advantages are combined."

He writes in 1861, "I am here at Broom Hall, with my excellent friend, Lord Abinger. It is now twenty-two years since I can date back his friendship, and it has ever been unchanged and firm. I am received more as a member of the family than as an ordinary friend, and am as much at home as though I were one of them. We have here several distinguished visitors, among them Lord Campbell, the chancellor, the Hon. P. S. Scarlett, etc. etc., all highly intellectual, and interesting in conversation, with a simplicity of manners and an unaffected bearing which renders them truly great. The refinement of life, as found here, united with so much simplicity, is without doubt the culminating point in civilization."

To his sister, Mrs. J. W.:—

"LONDON, Aug. 5, 1867.

"To complain of my own difficulties and troubles, I feel would be the height of ingratitude when I recall the innumerable mercies I have received during a long life, and those which I am still receiving from day to day. I regret being kept here on account of Martha, who longs to get back very naturally; but it cannot be avoided, and she will not be persuaded to leave me. She performs all her own duties and assists me in a thousand ways."

Mr. Wheelwright gave much attention to the subject of ocean highways, as guarding against the danger of collision.

He welcomed with enthusiasm the enterprise of Prof. B. A. Gould in the establishment of an observatory in Cordova. He writes, —

“While in England I conversed with Admiral S—— on the subject, who expatiated on its value and importance. When our late friend, Lieut. Gillies, proposed such an establishment, I encouraged him all in my power. Prof. Gould will no doubt make it a purely American enterprise, as it should be; and I earnestly hope he will find friends to aid him in an undertaking so important to the scientific world. Dr. Rawson is much gratified, and expresses an unhesitating opinion that the government will pursue the same course as was adopted by the government of Chili in regard to Gillies’ Observatory.”

At a reception given him after his return to this country, Dr. Gould said, —

“On the 25th of August, 1870, I arrived in Buenos Ayres with my family, and from that day until that on which I left the pleasant capital, just two months ago, our history is a record of private kindness and public generosity. Thence we ascended the La Plata, threading an exquisite maze of beautiful and closely crowded islands, decked with the dark-green foliage and glowing fruit of the orange, etc.

“In the thriving town of Rosario, two hundred and fifty miles above Buenos Ayres, we found a hospitable welcome at the house of our distinguished countryman, William Wheelwright. On the day following we traversed the Pampa

westward for yet another two hundred and fifty miles over the railway which he had just completed."

Dr. Gould speaks of the numerous flocks of sheep and cattle roaming at large. He adds, "The sparse settlements could be seen for a dozen or more miles away, their white-washed walls and their few trees arresting the attention on the horizon of this terrestrial ocean, just as a distant sail fixes the attention of the seaman. At intervals the ground was scarlet or white or purple, with large patches of ver-bena or portulacca; the taller shrubs served as trellises for the passion flower, etc."

Mr. Wheelwright writes from London in 1871, —

"I went to St. Leonard's to visit my partner, Mr. Brassey, whom I found suffering so severely that I was obliged to leave the room. The next morning I found him calm and quiet. He was much gratified to see me, and expressed all I could desire in regard to the management of our affairs. I shall feel his loss very much.

"The Central Argentine Railway caused me, for a long time, great anxiety, but Mr. Brassey came forward in a most magnificent way, and this great undertaking was secured. Could I have found any party who would step into my shoes and assume the responsibilities as well as benefits, I would have been most glad to relinquish all on the guarantee that the road should be carried out. Mr. Brassey, however, would not consent to anything unless I became a partner and took the lead."

In this connection we give the following: —

(*Transandine Telegraph.*)

BUENOS AYRES, HOTEL DE LA PAIX,

July 26, 1872.

J. CLARK, Esq.

My Dear Sir,—While I hear the booming of guns, the ringing of bells, and the rejoicing of multitudes on this eventful day, allow me to offer you my warmest congratulations that your great enterprise has been crowned with success; that the populations of the East and West are thus brought together; that the formidable barrier of the Andes has thus been overcome; and this Republic will owe you an eternal debt of gratitude for this immense boon you have just conferred upon them.

Accept my best wishes.

W. WHEELWRIGHT.

VALPARAISO, July 26.

WM. WHEELWRIGHT, Esq.

My Dear Sir,—I feel proud in receiving your warm congratulations, which I beg you to share with me for the happy success obtained this day.

My country, Mr. Wheelwright, is indebted to you for the elements of progress introduced there since 1841. Not only steam navigation, railways, gas and water works, coal mines, and a number of other works introduced by you, have flourished in Chili, but the first electric telegraph erected in South America by you in Chili, twenty-two years ago, is to-day extended to Buenos Ayres, thus enabling the West Coast to salute gratefully the illustrious promoter of progress on both sides of the Andes.

Accept, therefore, dear sir, my congratulations ; and I remain yours very respectfully,

JOHN B. CLARKE.

(Telegram from Chili.)

A. EDWARDS TO W. WHEELWRIGHT.

VALPARAISO, July 31, 1872.

My remembrances of gratitude, which are as enduring as ever. Every man who loves his country knows how much you have contributed towards our aggrandizement.

May God preserve you many years !

AUGUSTIN EDWARDS.

CHILE AND MR. WHEELWRIGHT.

(By Transandine Telegraph.)

BUENOS AYRES, July 29, 1872.

H. E. SSB ERRAZURRIS, *President of Chili*,—

In the name of the science and progress of this century I have the honor to congratulate Y. E., the government, and the inhabitants of the Republic of Chili, on the triumph obtained by means of the telegraph which has placed the people of the Pacific and Atlantic in instantaneous communication.

WM. WHEELWRIGHT.

SANTIAGO, July 30, 1872.

WM. WHEELWRIGHT:

A thousand thanks for your enthusiastic congratulations. I return my cordial salutations to the man who has so many titles to the love and gratitude of my country.

F. ERRAZURRIS.

BUENOS AYRES, July 29, 1872.

W. WHEELWRIGHT to ADMIRAL BLANCO

y ENCELADA, CHILI.

Admit my congratulations for the triumph obtained by science overcoming the Pampas and the Andes, allowing me affectionately to salute my old and venerated friend.

SANTIAGO, July 30, 1872.

W. WHEELWRIGHT:

Admiral Blanco y Encelada returns with pleasure to his old friend his congratulations for so grand a triumph, obtained by science over the mountains and the plains.

VALPARAISO, July 28, 1872.

M. E. DE SARRATEA to W. WHEELWRIGHT.

We were not aware of your being in Buenos Ayres. This will explain to you our silence. Your name and progress are indelibly fixed in the minds of our citizens, and while we celebrate the great event of the day we do not forget how

much we owe to your foresight and untiring constancy. I salute you in the name of all friends in Valparaiso.

JULY 29, 1872.

W. WHEELWRIGHT to M. E. DE SARRATEA.

I accept your congratulations and those of my friends in Valparaiso. Let us thank God that the mountains and the plains have been overcome by that mysterious element which conquers distances and annihilates time. May it be the harbinger of good to both Republics, uniting them in closer bonds — union and fraternity.

A marked characteristic of Mr. Wheelwright was his disinclination to speak of himself and his doings. The silence of such a man teaches a salutary lesson to the multitude of talkers that have nothing to say, of egotists that never did anything. From his private letters, however (though many of the most valuable of them are lost), we gather not only incidents of his history, but unconscious disclosures of his character, deeply interesting in their connection with his public labors.

We give the following:—

“I have ever found in the governments of Peru a spirit of fairness and candor, and a desire to facilitate, as far as possible, the operations of the company. The conduct observed by the government of Chili merits the utmost praise. The Executive granted me every facility and renewed the decrees in a most prompt and friendly manner. To the native inhabitants of the west coast I owe a great debt for their unwearied kindness.”

"All my enterprises have been lessons in which I have had full time to learn patience."

"Jan. 1, 1865. This first morning of the new year has broken forth most gloriously—an unclouded sky, a fresh and cool air from the pampas, and everything to fill our hearts with gratitude and love to our Heavenly Father for the mercies he has so abundantly bestowed upon us. I was out upon the pampas lately, and I cannot describe to you the beauties of the rising and setting sun on this great ocean of sand. In many parts nothing interrupts the vision; the first and last of the curving edges are seen as in the clear and calm sea. The perfect stillness that follows the setting sun has an extraordinary effect. Such entire repose of nature," etc.

On his first visit to Rosario, he writes:—

"I do not know when I have been more pleased than at the sight of this magnificent river (the Parana). There is water enough all the way for a line-of-battle ship, but the entrance admits only of sixteen or seventeen feet. . . . Never was there a country so admirably adapted to railroads as these pampas. You look out upon an ocean of land, bounded by the horizon with a hill or a knoll; the only relief is an occasional umbre tree, the sentinel of the desert.

"No calculation can possibly embrace the vast variety of natural wealth which will flow from these provinces when they obtain the railroad, and I cannot feel doubt but that I shall succeed in accomplishing it."

He visited Washington with reference to the establish-

ment of a mail communication between the United States and South America. He says, "I found other parties interested, and that some political engine must be brought to bear, besides the payment of a considerable sum, if successful. This I set my face against. If any bribery is involved, it shuts the door, as far as I am concerned."

"ROSARIO, 1869.

"The delays and troubles of this railway have been very trying: first, the terrible drought, which continued for two months, the earth becoming so hard that the men found it most difficult to pursue their work; then deluges of rain, which stopped the work altogether for some time; and then came the locust, which devoured the Indian corn and every green thing, except the wheat, which was already too ripe; then the harvesting of the wheat, which deprived us of all our laborers; then followed an awful storm, which washed the road in many places, to which I might add a thousand minor troubles, which all conspired to render our project most difficult. It may truly be said that every yard of the road constructed has been a battle. A kind Providence has upheld and preserved me."

Writing to his sisters in 1843, he says,—

"If there is one thing that affords me happiness, it is to be the instrument of any benefit to my kindred, and above all to our parents; and if my mother only knew the pure pleasure I feel in having it in my power to do even the little I have done, she would feel no hesitation in receiving.

She would rather be thankful that she has been spared to occasion so much pleasure to her son."

LONDON, July 31, 1856.

"I deeply deplore the premature death of Mr. Alexander Campbell, which his brother has announced to me. I had expected him here again and had depended upon him in Chili. It is rare to meet with a character so pure; to his friends it is a sad blow indeed."

"A well-balanced mind seems to me one of the kindest gifts of Heaven. How often I have envied men who were unaffected by light or darkness, who kept the scale at the beam under joy or sorrow. I find, in spite of myself, how hard it is amidst the storms and strife of life to preserve that equanimity of disposition so desirable, and which so few attain. I feel ashamed that I allow trifles to disturb and annoy me, when I can carry great burdens on my shoulders without complaint."

"It is in the great battle-field of life that our duties lie. God never intended that we should hide ourselves away in sloth and idleness; the great thing, however, is to see a God employed in all the good and ill that checkers life, and to endeavor to live to him and his glory. Chalmers says, 'It is not in the retirement of convents that we can serve God best, but in the open broad world.'"

On receipt of a letter from his daughter enumerating some unpleasant occurrences:—

"These are the anxieties of life, intended, no doubt, for our good, and we must endeavor to view them as such, and

to leave them in the hands of our Heavenly Father, who knows best what is good for us. This state of constant anxiety I am somewhat accustomed to, and am not easily disturbed. Occasionally, however, complaints will break forth, but they are very ephemeral; I soon recover my wonted elasticity of spirits."

"I have, as you can imagine, much to do. All my time is occupied, my patience tried, and my temper ruffled; but I get on very well, and am much happier here than in England or at home. All I want is a humble and grateful heart."

"We should allow children to indulge in the innocent pleasures of youth. Life is sombre enough without making it more so, and while the shades are passing over us, and our gray hairs forbid youthful enjoyments, we should endeavor to derive our pleasures from the enjoyments of others in the sun and shade of life. God designs us to live in the world to enjoy it, and to resist its frowns by a dependence on him."

On receiving a proposal to return to his own country and to occupy a farm, with the inducement of water-power for manufacturing purposes, he writes, —

"I feel that my mind is too active to be pent up on a farm. *Food and clothing* are not all we require, nor all that is required of us. There are duties of a higher order; we all owe a debt to the world, and should do all in our power to promote the benefit of our fellow-men."

"LONDON, March 4, 1861.

"This is the day for the inauguration of the President. May God prepare peace and order, and direct us in the paths of wisdom!"

“ 1862.

“ I think so intently of our country that that I am obliged to confine my reading to subjects in no way connected with the war.”

“ Thanks for the speech delivered by Mr. Everett ; it breathes the spirit and fire of patriotism. I wish all our countrymen were imbued with the same love of constitutional liberty and right.”

“ This terrible event, the assassination of President Lincoln, came upon us like a thunder-bolt. We hope it may prove the act of a maniac.”

In reply to one of his friends:—

“ That you are content is, after all, worth more than anything else, for money never brought contentment. ‘ A contented mind is a continual feast.’ However much Fortune may have frowned upon you, you have resources of pleasure which few enjoy, so if it be taken in one way, it is given in another.

“ You say that it is not riches only we need, and, indeed, you are quite right. Riches are only good in contributing to the wants of others, and unless that be the first desire of the heart, they become a curse. Everything here is visionary and transitory ; we want to be rich in gratitude to our Heavenly Father, rich in love to him, rich in faith ; these are the true riches which we should aspire after.”

On being solicited to relinquish his plans and return home:—

"I feel a great desire at times to look in upon you, if I could do so, but I have put my hand to the plough and must not look back. I have a great object before me—an object which concerns millions and their welfare—and when I compare its value to the insignificant annoyances which I meet with, complaints are dissipated, my strength seems renewed for the combat, and I press forward with as much energy as my increasing years will permit."

The following is the last letter of Mr. Wheelwright in our possession. It is addressed to his brothers and sisters:—

"ROSARIO, Feb. 8, 1873.

"I feel it necessary, and Martha does also, to leave this country as soon as we can, for the health of both of us. To leave things unsettled is very painful to me, but I have held on even longer than I should have done under the circumstances. My own interests would never have kept me here so long. Should Providence spare our lives, we may leave before the year terminates. I find that I must have perfect quiet; any mental labor I find injurious, and however much I like to work, I must desist. This country is advancing most rapidly. A great emigration is setting in to occupy these vast plains, which it will take generations to fill."

No limit can be assigned to Mr. Wheelwright's influence on the destinies of South America. Nor can that influence be restricted to the advancement of material interests. As respects greater things than these, the change of public sentiment in some of those States is already marvellous. On the 9th of May, 1876, the President of Venezuela held this

language to the House of Congress (to which they most warmly responded):—

“I ask you to pass a law which shall declare the Church of Venezuela independent of the Roman Episcopate, and ask that you further order that parish priests shall be elected by the faithful, the bishops by the rectors of parishes, the archbishops by congress, returning to the usage of the primitive church, founded by Jesus Christ and his apostles.”

Changes so radical in the public sentiment of a country invite attention to their cause.

Mr. Wheelwright's thoughts and plans for the regeneration of South America were not restricted to material appliances. His half century of labor was indeed devoted to the advancement of her material interests; but a mind like his could not fail to discern the bearing of this on her moral elevation. How potent, in this respect, must be those mighty agents of civilization, steam and electricity, if with these could be associated the immeasurable blessings of an open Bible, a pure Christianity!

Through his whole life every enterprise of Christian benevolence found in Mr. Wheelwright a faithful friend. In his more private charities he was kind, generous, unostentatious. He rests from his labors and his works do follow him.

The passages that follow are from the funeral discourse of the venerable Leonard Withington, D. D.:—

“Herein is my Father glorified, that ye bear much fruit; so shall ye be my disciples.’ These words will immediately turn your thoughts to him whose remains are soon to be committed to the ground, ‘dust to dust and ashes to ashes’;

but we do it in 'sure and certain hope of a glorious resurrection.'

"Why do you hope, while we are in tears, he is in glory? I answer confidently, Because he had the Christian spirit, — its humility, its sorrow for sin, its faith, and its devotion; because God is glorified by the man who in his life bears much fruit. . . . About thirty years ago Mr. Wheelwright published a pamphlet which made a great impression on thoughtful readers. I read this pamphlet with a deep impression that its author was a man of genius, — certainly in his line. It presented a magnificent plan which none but an original thinker could have devised, and which would have been thought a fairy tale, had it not been partly carried into execution, and the possibility of the execution of the whole clearly demonstrated. It was to connect the Isthmus of Panama with three, perhaps four, diverging lines of steamboats, and then to connect these lines with railroads across the continent of South America; so that the scheme presented a perfect net-work of intercourse and communication for all trading nations with a people hitherto separated by impassable mountains and stormy seas.

"The very plan seemed to be a comment on that passage of Scripture which says, 'Prepare ye the way of the Lord, make straight in the desert a highway for our God.'

"Our friend displayed his genius not only by the sublimity of his plans, but by procuring the means of executing them. What could he do? What *did* he do? He came first to the capitalists of his own country; but they regarded the plan as a splendid moonshine. What did he do? I will tell you what

he did *not* do. He did not despair, nor cease to see the feasibility of his plan. His first step was to make himself master of all the facts; he went over almost every step of the ground, many parts on foot, discovered the places where coal was to be found, devised means, calculated expenses, and armed himself with all the knowledge and wisdom that God and earnest observation had given him. He then went to London, told his story, and was successful.

“Perhaps you will ask me, What has all this to do with his religious character? But do you not see the signs of the times? Do you not hear the words of Scripture? Consider what the railroad is now doing in the Eastern continent, — connecting Palestine, Turkey, Persia, Hindostan, China and even Japan, compelling those conservatives of delusion to soften their errors and to move with a moving world; and then consider what the prophet Daniel says, ‘Many shall run to and fro, and knowledge shall be increased.’

“Believing that our brother saw the end of his work, and felt the promptings of the end in the beginning, I venture to claim for him the noblest motives of a true Christian.”

Soon after the publication, in Paris, of M. Alberdi’s book, the “*Revue des Deux Mondes*” contained an article from which we take the following:—

“Mr. William Wheelwright is a North American, who devoted fifty years of his life, since the shipwreck in which he nearly perished in 1823 on the coast of La Plata, to great enterprises in South America. He encountered there numerous and powerful obstacles, which he conquered through his energy and perseverance.

“The book which M. Alberdi has just dedicated to his memory is written to increase his fame,—a fame less high-sounding than that of most heroes, real or pretended, of the sword or of politics, but purer, and founded upon greater services in the cause of civilization and humanity in the different scenes of his labors, the republics of the Southern Pacific and the Argentine Republic. The name of Wheelwright will be forever identified in these distant countries with the establishment of the first line of steamboats between Panama and Valparaiso ; the construction of the Argentine Grand Central Railroad between the port of Rosario, upon the Parana, and the second city of the Argentine Republic, Cordova, the capital of the province of that name ; a railroad, which in the mind of the founder was destined to pave the way for a twofold railroad communication between Buenos Ayres and Chili, and between Buenos Ayres and Bolivia ; finally, with the construction of a railroad of more modest proportions, but with immense political and commercial advantages, between Buenos Ayres and the Bay of Ensenada. This last enterprise crowned the life of Mr. Wheelwright by connecting his age with his youth fifty years after the shipwreck, which, by a chain of singular circumstances, determined his fortunes, and caused his active mind to realize the utility and immense importance of a scheme of which he saw the accomplishment.

“Such is, in a few words, a *resumé* of the life of Mr. Wheelwright, omitting a number of minor undertakings, such as lighthouses, piers, and the discovery and working of coal mines, all more or less closely bound with his three principal works.

"The author of this just tribute to his memory, M. Alberdi, formerly minister of the Argentine Republic to France and England, is a distinguished political writer, an ardent disputant, and a profound thinker. . . . His book is not statistical, is scarcely political. It deals rather with social philosophy, and is an ardent glorification of the works of peace in the interest of half a vast continent, where there is so much yet to be done,—interest closely allied to that of old Europe, let us say rather, inseparable from the general interest of humanity. Though speaking of details and figures, this sketch of the efforts of a single man for the accomplishment of grand projects, which raised such difficult questions and affected so many interests, has something of a dramatic character.

"The writer of these remarks knew this simple and grave man, when already advanced in years, but still indefatigable in labor, temperate in his life, and of an irreproachable integrity; in whom was found united, in a wonderful degree, practical common-sense with a genius for the largest schemes."



APPENDIX B.

THE current of Mr. Wheelwright's benevolence ran through every channel that led to the welfare of humanity, but his early training upon the sea directed his efforts mainly to improving the condition of seamen and to the safety and comfort of those who travel upon the ocean. His theory was on all occasions to strike at the root of the tree of evil, rather than to lop off its branches. So while he contributed liberally to the funds of the Seaman's Friend Society, he always insisted that the system of advance wages made the sailor a slave to his landlord, and that until this was abolished, there could be no hope of real improvement in the character of seamen or of their elevation in social life. It is to be regretted that his letters upon this subject have not been preserved. When the regular Cunard packet service was established thirty-five years ago, while he was engaged in his steamship and railroad projects in South America, he was not so far from home and from humanity, that his mind was not occupied with an important idea, which for many years was unheeded, but which at about the time of his death was at least partially adopted. At an early period he endeavored to impress upon the minds of British admirals and command-

ers visiting the port of Valparaiso the importance of what have since been termed "steam lanes"; in other words, of separate and distinct routes for steamers outward and homeward bound between England and America. He clearly foresaw that the commerce of the ocean was at no distant day to be carried on by steam, and that there would consequently be an increasing danger of collision unless a "law of the road" should be adopted. He fully realized the mistaken policy of the United States government, which, by its prohibitory laws forbidding its own citizens to be the owners of steamships, threw the profit of ocean steam navigation into the hands of foreigners; but he knew that his own countrymen, who were thus forced to travel under a foreign flag, were exposed to the imminent danger which he was solicitous to avert.

In his frequent passages across the Atlantic, he generally selected the steamer commanded by his friend Capt. McMickan, of the Cunard line, and it was owing to an accident that occurred on one of these voyages that his mind, and that of Capt. McMickan, was drawn to a still more serious consideration of the subject. Until the day of his death they worked together for the accomplishment of this object, seconded by others who took a deep interest in it, and especially by Capt. R. B. Forbes, who held a high place in his esteem.

In 1871, Mr. Wheelwright addressed a letter to the Liverpool Board of Trade, which gave rise to the subjoined correspondence:—

"LONDON, GLOUCESTER LODGE,
"REGENT'S PARK, July 13, 1871.

"*Sir*, — The very large fleet of steamers that are engaged in the conveyance of passengers and freight between Europe, the United States, and Her Majesty's Colonies of North America, and the rapid increase of this fleet renders it imperative that some steps be taken to avoid the risk of collision, and to protect the lives of many thousand fishermen engaged upon the Banks of Newfoundland, who during the fogs and dark nights are in imminent danger of being destroyed by steamers in their rapid and blind flight across the Atlantic.

"That these dangers may not only be greatly lessened, but absolutely avoided, provided proper steps are taken and the rules adhered to, as the case demands, and which are perfectly practicable, is shown on the accompanying chart, where are laid down in colors two bands or zones of sixty miles in breadth each, — the northern for western-bound, the southern for eastern-bound steamers.

"These bands in colors are separated by an intermediate division of thirty miles.

"The north extreme edge of the northern band has also a space of thirty miles, south of which no fisherman will anchor, and thus be perfectly protected from collision with the steamers.

"These two great ocean roads can be strictly adhered to by the steamers without the slightest difficulty during the entire length of their voyages from land to land, even through dense fogs of days' duration, by their dead reckon-

ing, and every commander of a steamer will naturally avoid any deviation beyond the band laid down.

"The commanders of merchant ships, with the tracts defined in colors on these charts, will strenuously avoid the danger of collision by keeping outside of them as much as possible.

"If experience of the past is to guide us as to the future, the commerce of the world must soon be conveyed almost exclusively by steamers, and hence the importance of availing of all circumstances to render this new system of navigation as secure as possible against accidents.

"I beg to accompany the remarks of an experienced commander of a trans-Atlantic steamer, which has the approval of other sensible and practical men.

"The importance of this matter will, I trust, be a sufficient apology in thus addressing you; it is so linked with the cause of humanity as to justly entitle it to the serious consideration of a paternal government.

"I have the honor to remain, respectfully, sir,

"Your most obedient servant,

"WM. WHEELWRIGHT.

"To the Rt. Hon. Chichester Fortescue, President of the Board of Trade."

"SUGGESTIONS OF AN EXPERIENCED COMMANDER OF A
"TRANS-ATLANTIC STEAMER.

"That all western-bound steamers should take the northern course and cross the end of the Banks of Newfoundland from 43 to 43½ latitude, thus avoiding the easterly current,

and as a rule there is but little ice in this neighborhood, except in the spring.

"Fishermen being duly notified of this would only be too glad to anchor to the northward of this track, and avoid the collisions and loss of life they are now liable to through the dense fogs which prevail on these banks in the fishing season.

"That the eastern-bound ships should pass the end of the Banks of Newfoundland in 42 to 42½ latitude, availing themselves of the easterly current, and as a rule clearer weather, thus leaving a fair space between the two tracks for sets of current, etc.

"The steamers to follow their usual course, after passing the bank, would keep them at a fair distance for the rest of the passage; but the most dangerous part is in the vicinity of the banks, and from April to September.

"Unless there are some such regulations made, we will often have to chronicle collisions and loss, as no human sight can pierce the dense fogs which prevail in that vicinity, and often-blowing strong fog-whistles are not heard far enough to prevent collision.

"I am confident it would be the saving of many lives and valuable property if carried out."

"BOARD OF TRADE,

"WHITEHALL GARDENS, Aug. 23, 1871.

"STEAMSHIPS. — MISCELLANEOUS. — COLLISIONS.

"Sir, — With reference to your letter of the 13th ult., I am directed by the Board of Trade to transmit a copy of a letter

from the Secretary of the North Atlantic Steam Traffic Conference, enclosing a report upon your suggestion as to the courses to be followed by steamships crossing the Atlantic.

“The plans submitted by you are herein returned.

“I am, sir, your obedient servant,

“THOMAS GRAY.

“*W. Wheelwright, Esq., Gloucester Lodge, Regent's Park.*”

“NORTH ATLANTIC STEAM TRAFFIC CONFERENCE,

“10 WATER STREET, LIVERPOOL, 17th August, 1871.

“STEAMSHIPS.

“*Sir*, — The subject to which your letter M6359 of the 26th July last and its enclosures relate has been on several occasions under the consideration of this conference, principally with a view of ascertaining whether the risk of collision between the Atlantic steamers bound eastward and those bound westward were capable of being diminished by the adoption of some such plan as that recommended by Mr. Wheelwright, but the conference has been forced to the conclusion that no scheme of the kind which has yet been proposed is practicable.

“There are obvious objections to laying down any hard and fast rule upon the subject, and obvious difficulties in enforcing any such rule by legal penalties.

“I enclose herewith a copy of a letter from Capt. Judkins (who was for many years the Senior Commander in the Cunard line) to Mr. Charles McIver upon Mr. Wheelwright's proposal, which may be of interest to the Board, as contain-

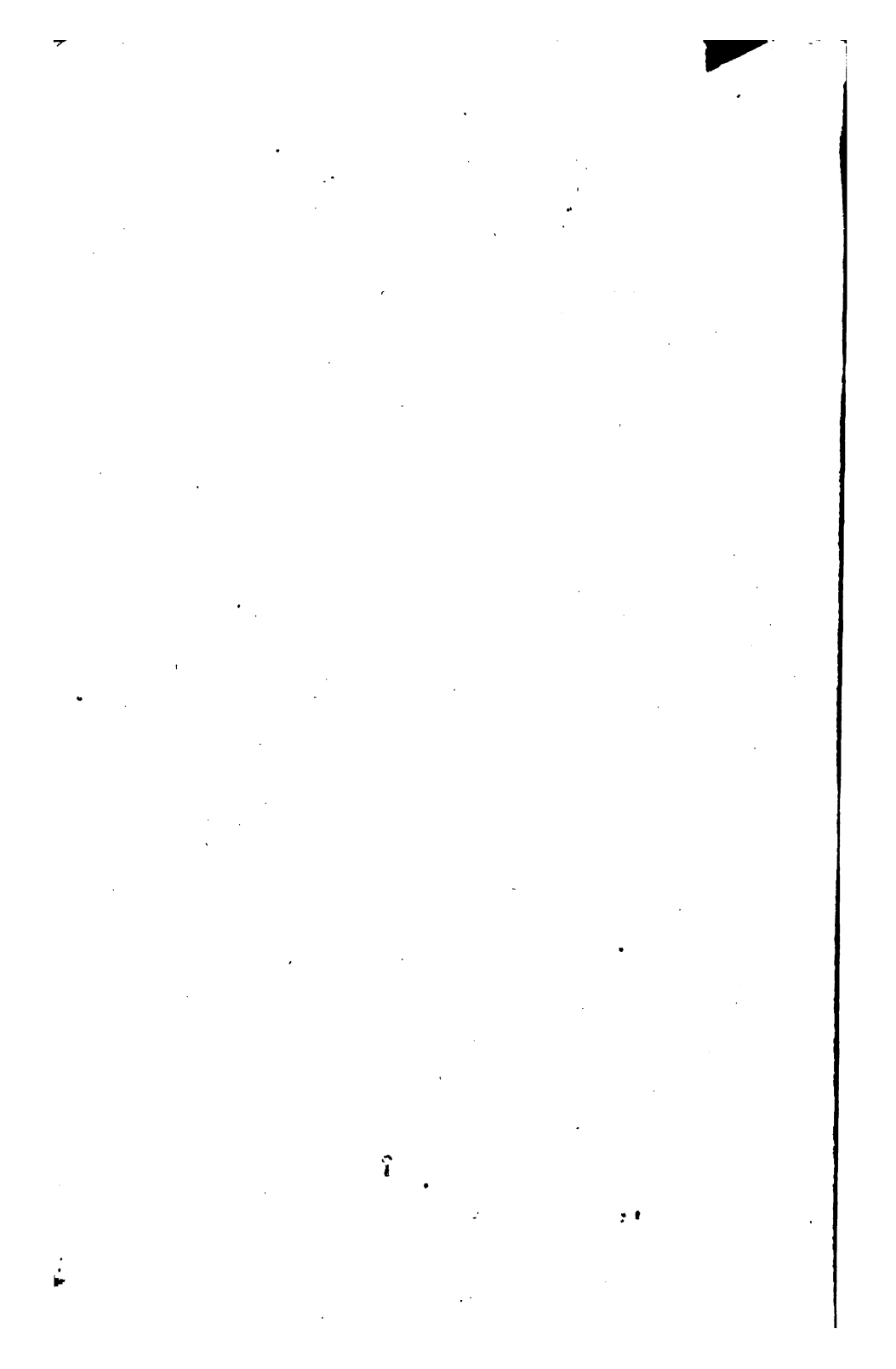
ing the opinion derived from great experience of a very eminent member of the mercantile marine. I return the papers herewith. I have the honor to be, sir,

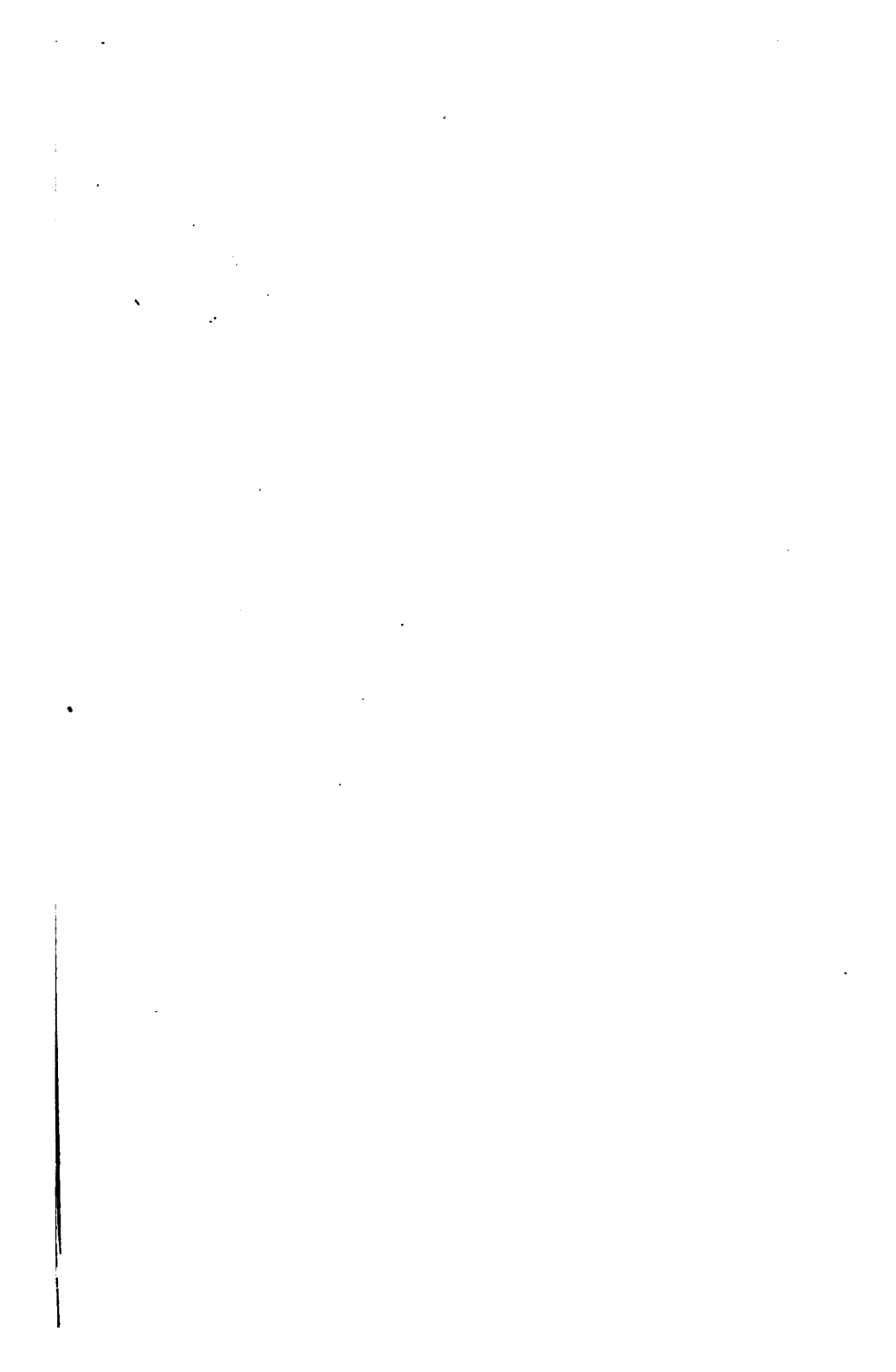
"Your obedient servant,

"GRAY HILL, *Secretary.*

"*The Assistant Secretary, Marine Department, Board of Trade.*"

It will be seen that the proposition was not even then favorably regarded, but within a year Capt. McMickan has testified that the adoption of separate outward and homeward tracks by the Cunard Steamship Company is owing to the persevering efforts of Mr. Wheelwright, who first suggested to them the idea.







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